Answer Key
(Step-By-Step Mathematics 2)

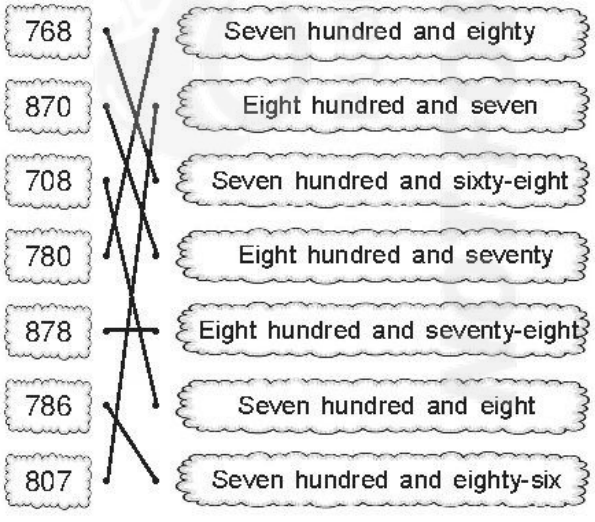
Unit 1 Numbers To 1000

Drills

Exercise 1

No.	Numeral	Words
1.	865	Eight hundred and sixty-five
2.	792	Seven hundred and ninety-two
3.	914	Nine hundred and fourteen
4.	683	Six hundred and eighty-three
5.	907	Nine hundred and seven

Exercise 2



Exercise 3

No.	Numeral	Hundreds	Tens	Ones
e.g.	438	4	3	8
1.	520	5	2	0
2.	306	3	0	6
3.	387	3	8	7
4.	636	6	3	6
5.	294	2	9	4

Exercise 4

1. (a) 60
   (b) 4 hundreds / 400

2. (a) 600
   (b) 3 ones / 3

3. (a) 200
   (b) 9 tens / 90

4. (a) 600
   (b) tens

5. (a) 4
   (b) tens

Exercise 5

1. 8 hundreds 7 tens 2 ones
   = **800** + **70** + **2**
   = **872**

2. 5 hundreds 6 tens 3 ones
   = **500** + **60** + **3**
   = **563**

3. 7 hundreds 8 tens
   = **700** + **80**
   = **780**

4. 9 hundreds 5 ones
   = **900** + **5**
   = **905**

Perform

Exercise 1

1. 482 + 1 = **483**
   1 more than 482 is **483**.

2. 536 − 10 = **526**
   10 less than 536 is **526**.

3. 627 − 20 = 607
   20 more than **607** is 627.

4. 824 + 100 = 924
   100 less than **924** is 824.

5. 559 − 539 = 20
   20 more than 539 is 559.

6. 355 − 285 = 70
   70 less than 355 is 285.

7. 384 − 80 = 304
   80 more than **304** is 384.

8. 820 + 60 = 880
   60 less than **880** is 820.

Exercise 2

1. (a) 556, 505, 465, 456
   (b) 877, 866, 863, 836
   (c) 653, 624, 545, 456

2. (a) 456, 526, 562, 625
   (b) 393, 399, 933, 939
   (c) 243, 276, 755, 801

Exercise 3

1. (a) 965
   (b) 427
   (c) 703

2. (a) 792
   (b) 346
   (c) 508

Exercise 4

1. (a) 117
   (b) 315
   (c) 315
   (d) 69
   (e) 97
   (f) 315, 218, 186, 117

2. (a) 637
   (b) 349
   (c) 515
   (d) 349
   (e) 637
   (f) 349, 423, 515, 637

Exercise 5

1.

Hundreds	Tens	Ones
6	5	3

The digit in the hundreds place is twice the digit in the ones place.

3 + 2 = 5
The digit in the tens place is 2 more than the digit in the ones place.

The 3-digit number formed is **653**.

2. (a) 740 (b) 470

Exercise 6

1. 123, **124**, **125**, 126, 127, **128**

2. **636**, 635, 634, 633, **632**, 631

3. (−2) 841, 839, **837**, 835, 833, **831**

4. (−100) **930**, 830, 730, **630**, 530, **430**

5. (−20) 590, 570, **550**, 530, **510**, 490

6. (+10) 456, 466, 476, 486, **496**, **506**

7. (+100) 300, 400, 500, **600**, **700**, 800

8. (+50) **200**, 250, **300**, 350, 400, **450**

Achieve

Exercise 1

E	12 tens	580
Y	43 tens 8 ones	210
H	58 tens	280
I	17 tens 40 ones	360
S	28 tens 9 ones	1000
N	25 tens 5 ones	120
L	100 tens	255
T	11 tens 6 ones	606
O	19 tens 90 ones	438
C	36 tens	116
P	60 tens 6 ones	289

H	O	N	E	S	T	Y		I	S		T	H	E
580	280	255	120	289	116	438		210	289		116	580	120

B	E	S	T		P	O	L	I	C	Y.
	120	289	116		606	280	1000	210	360	438

Exercise 2

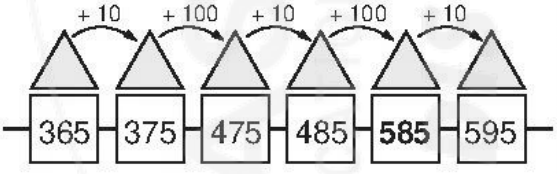
1. is smaller than
2. is smaller than
3. is smaller than
4. is equal to
5. is smaller than
6. is greater than
7. is smaller than
8. is greater than
9. is equal to
10. is smaller than

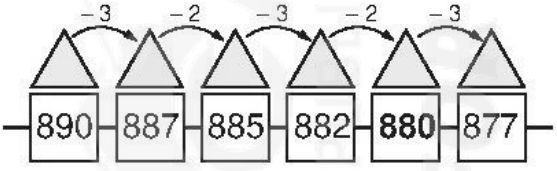
Exercise 3

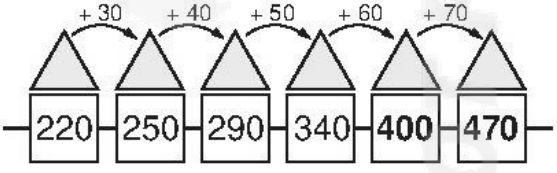
1. 9
2. 7
3. 19
4. 69
5. 500

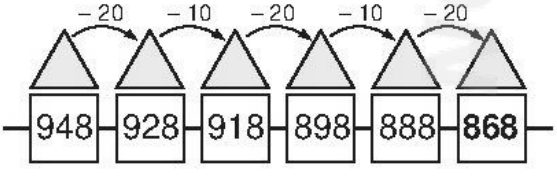
Challenge

Exercise 1

1. 

2. 

3. 

4. 

Unit 2 Addition And Subtraction Within 1000

Drills

Exercise 1

1. 371 + 45 = **416**

$$\begin{array}{r} {}^{1}3\ 7\ 1 \\ +\quad 4\ 5 \\ \hline \mathbf{4\ 1\ 6} \end{array}$$

2. 736 + 54 = **790**

$$\begin{array}{r} 7\ {}^{1}3\ 6 \\ +\quad 5\ 4 \\ \hline \mathbf{7\ 9\ 0} \end{array}$$

3. 542 + 237 = **779**

$$\begin{array}{r} 5\ 4\ 2 \\ +\ 2\ 3\ 7 \\ \hline \mathbf{7\ 7\ 9} \end{array}$$

4. 684 + 171 = **855**

$$\begin{array}{r} {}^{1}6\ 8\ 4 \\ +\ 1\ 7\ 1 \\ \hline \mathbf{8\ 5\ 5} \end{array}$$

5. 407 + 295 = **702**

$$\begin{array}{r} {}^{1}4\ {}^{1}0\ 7 \\ +\ 2\ 9\ 5 \\ \hline \mathbf{7\ 0\ 2} \end{array}$$

6. 337 + 393 = **730**

$$\begin{array}{r} {}^{1}3\ {}^{1}3\ 7 \\ +\ 3\ 9\ 3 \\ \hline \mathbf{7\ 3\ 0} \end{array}$$

7. 539 + 389 = **928**

$$\begin{array}{r} {}^{1}5\ {}^{1}3\ 9 \\ +\ 3\ 8\ 9 \\ \hline \mathbf{9\ 2\ 8} \end{array}$$

8. 264 + 158 = **422**

$$\begin{array}{r} {}^{1}2\,{}^{1}6\;4 \\ +\;1\;5\;8 \\ \hline \mathbf{4\;2\;2} \end{array}$$

9. 684 + 316 = **1000**

$$\begin{array}{r} {}^{1}6\,{}^{1}8\;4 \\ +\;3\;1\;6 \\ \hline \mathbf{1\;0\;0\;0} \end{array}$$

10. 485 + 515 = **1000**

$$\begin{array}{r} {}^{1}4\,{}^{1}8\;5 \\ +\;5\;1\;5 \\ \hline \mathbf{1\;0\;0\;0} \end{array}$$

Exercise 2

1. 563 − 47 = **516**

$$\begin{array}{r} 5\,{}^{5}\not{6}\,{}^{13}\not{3} \\ -\;\;4\;7 \\ \hline \mathbf{5\;1\;6} \end{array}$$

2. 308 − 65 = **243**

$$\begin{array}{r} {}^{2}\not{3}\,{}^{10}\not{0}\;8 \\ -\;\;6\;5 \\ \hline \mathbf{2\;4\;3} \end{array}$$

3. 879 − 326 = **553**

$$\begin{array}{r} 8\;7\;9 \\ -\;3\;2\;6 \\ \hline \mathbf{5\;5\;3} \end{array}$$

4. 782 − 245 = **537**

$$\begin{array}{r} 7\,{}^{7}\not{8}\,{}^{12}\not{2} \\ -\;2\;4\;5 \\ \hline \mathbf{5\;3\;7} \end{array}$$

5. 643 − 192 = **451**

$$\begin{array}{r} {}^{5}\not{6}\,{}^{14}\not{4}\;3 \\ -\;1\;9\;2 \\ \hline \mathbf{4\;5\;1} \end{array}$$

6. 926 − 489 = **437**

$$\begin{array}{r} {}^{8}\not{9}\,{}^{11}\not{2}\,{}^{16}\not{6} \\ -\;4\;8\;9 \\ \hline \mathbf{4\;3\;7} \end{array}$$

7. 703 − 426 = **277**

$$\begin{array}{r} {}^{6}\not{7}\,{}^{9}\not{\scriptstyle 10}\,{}^{13}\not{3} \\ -\;4\;2\;6 \\ \hline \mathbf{2\;7\;7} \end{array}$$

8. 527 − 285 = **242**

$$\begin{array}{r} {}^{4}\not{5}\,{}^{12}\not{2}\;7 \\ -\;2\;8\;5 \\ \hline \mathbf{2\;4\;2} \end{array}$$

9. 674 − 268 = **406**

$$\begin{array}{r} 6\,{}^{6}\not{7}\,{}^{14}\not{4} \\ -\;2\;6\;8 \\ \hline \mathbf{4\;0\;6} \end{array}$$

10. 420 − 361 = **59**

$$\begin{array}{r} {}^{3}\not{4}\,{}^{11}\not{2}\,{}^{10}\not{0} \\ -\;3\;6\;1 \\ \hline \mathbf{5\;9} \end{array}$$

11. 800 − 359 = **441**

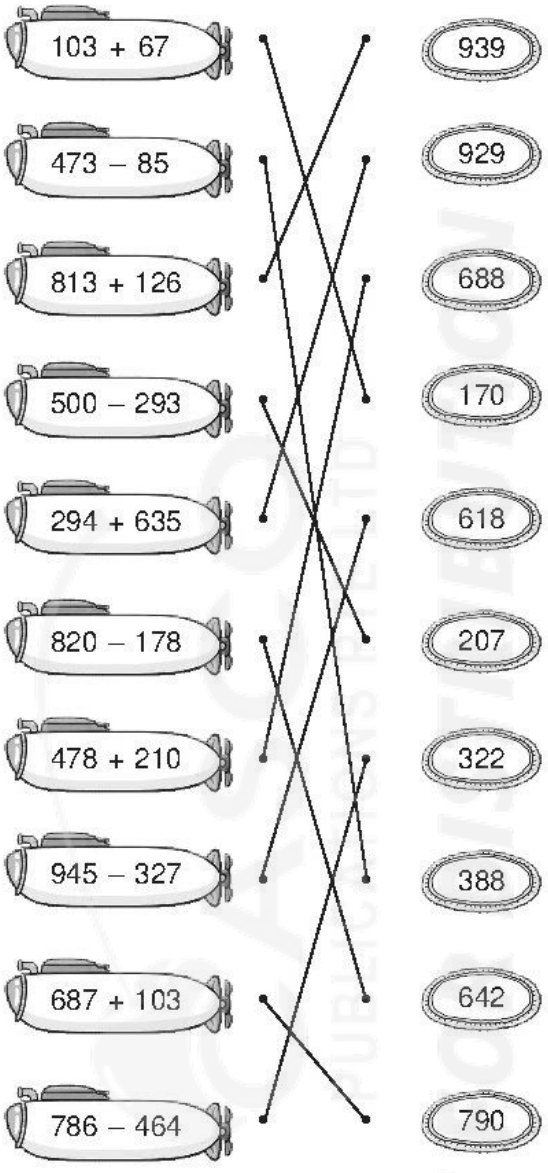
$$\begin{array}{r} {}^{7}\not{8}\,{}^{9}\not{\scriptstyle 10}\,{}^{10}\not{0}\;\;0 \\ -\;3\;5\;9 \\ \hline \mathbf{4\;4\;1} \end{array}$$

12. 1000 − 737 = **263**

$$\begin{array}{r} {}^{0}\not{1}\,{}^{9}\not{\scriptstyle 10}\,{}^{9}\not{\scriptstyle 10}\,{}^{10}\not{0}\;\;0 \\ -\;\;7\;3\;7 \\ \hline \mathbf{2\;6\;3} \end{array}$$

Perform

Exercise 1



Exercise 2

1. (4)
2. (1)
3. (3)
4. (2)
5. (1)
6. (3)
7. (4)

Exercise 3

1. 537 + 245 = 782
2. 978 – 435 = 543

Achieve

Exercise 1

1. 200 + 325 = 525
   325 + 200 = 525
2. 468 – 220 = 248
   468 – 248 = 220

Exercise 2

768 – 450 = 318
768 – 318 = 450

Exercise 3

1. 150 + **335** = 485
2. **296** – 60 = 236
3. **92** + 708 = 800
4. 900 – **567** = 333
5. **520** – 280 = 240

Exercise 4

1.
$$\begin{array}{r} 3\ {}^{1}2\ \boxed{5} \\ +\ 4\ 2\ 6 \\ \hline 7\ 5\ 1 \end{array}$$

2.
$$\begin{array}{r} {}^{1}7\ {}^{1}7\ 8 \\ +\ 1\ \boxed{5}\ 4 \\ \hline 9\ 3\ 2 \end{array}$$

3.
$$\begin{array}{r} 6\ \boxed{8}\ 6 \\ -\ 2\ 5\ 2 \\ \hline 4\ 3\ 4 \end{array}$$

4.
$$\begin{array}{r} {}^{4}\cancel{5}\ {}^{9}\cancel{0}\ {}^{10}\cancel{0} \\ -\ \boxed{1}\ 3\ 5 \\ \hline 3\ 6\ 5 \end{array}$$

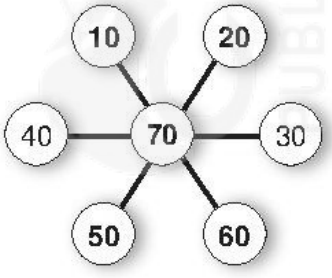
5.
$$\begin{array}{r} {}^{7}\cancel{8}\ {}^{14}\cancel{4}\ \boxed{9} \\ -\ 2\ 6\ 3 \\ \hline \boxed{5}\ 8\ 6 \end{array}$$

6.
$$\begin{array}{r} {}^{1}\boxed{4}\ {}^{1}6\ 5 \\ +\ 3\ \boxed{3}\ 7 \\ \hline 8\ 0\ 2 \end{array}$$

Challenge

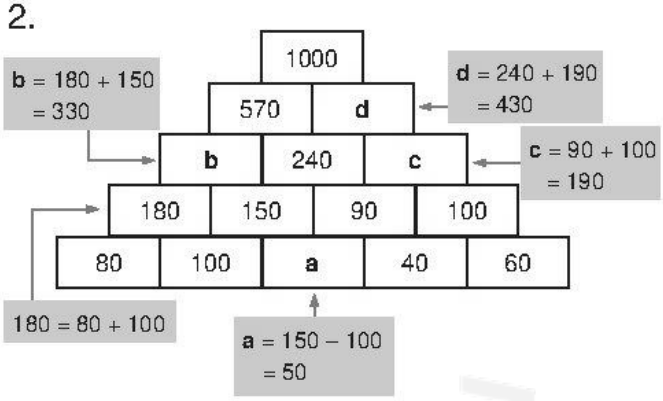
Exercise 1

1. Answers may vary.



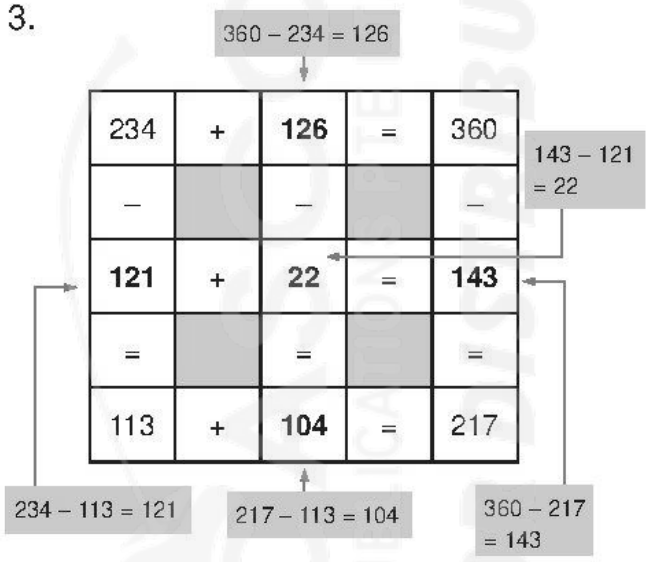
140 − 70 = 70
Two numbers that make 70 : 10 + 60, 20 + 50

2.

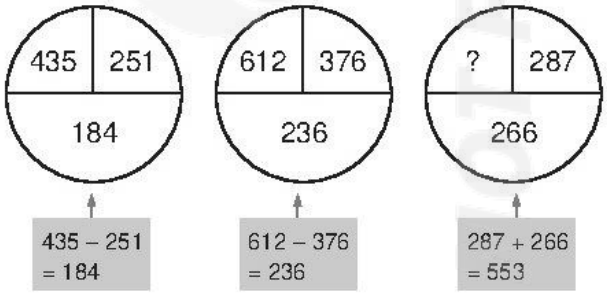


a = 50
b = 330
c = 190
d = 430

3.



4.



The missing number is **553**.

5. Use guess and check.

```
  1 E E
  1 E E
+ 1 E E
-------
  E 3 2
-------
```

Value of E	1	2	3	4
Checking	111 111 +111 333✗	122 122 +122 366✗	133 133 +133 399✗	144 144 +144 432✓

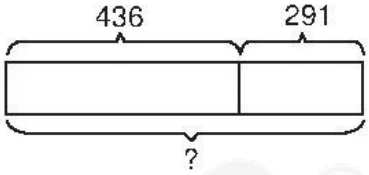
'E' stands for **4**.

Unit 3 Solving Word Problems Involving Addition And Subtraction

Achieve

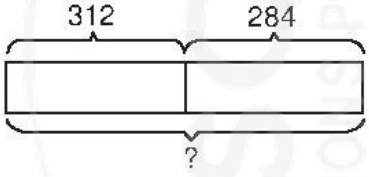
Exercise 1

1.



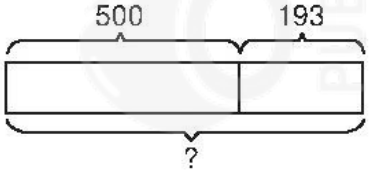
436 + 291 = 727
She made **727** necklaces and bracelets altogether.

2.



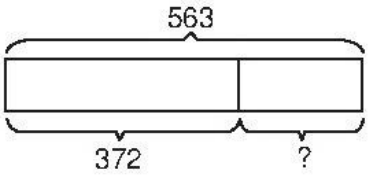
312 + 284 = 596
There were **596** people at the concert.

3.



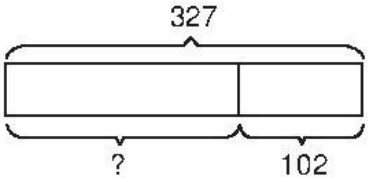
500 + 193 = 693
He collected **693** stamps and stickers in all.

4.



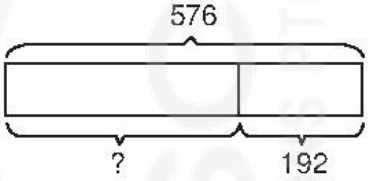
563 – 372 = 191
There were **191** girls in the hall.

5.



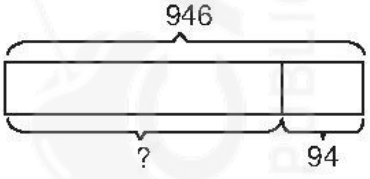
327 – 102 = 225
225 people were left on the train.

6.



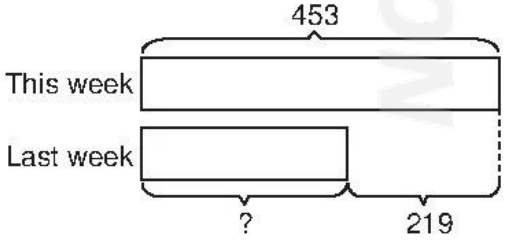
576 – 192 = 384
He had **384** stickers left.

7.



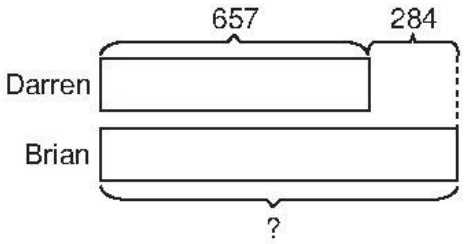
946 – 94 = 852
852 rattles were in good condition.

8.



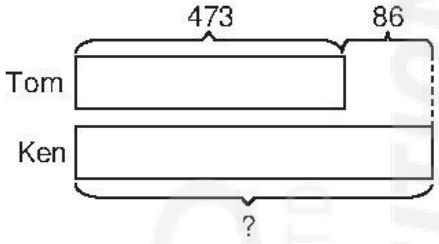
453 – 219 = 234
She made **234** bracelets last week.

9.



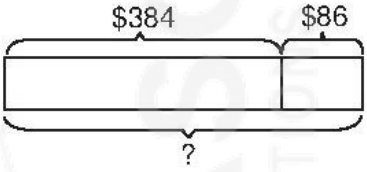
657 + 284 = 941
Brian collected **941** game cards.

10.



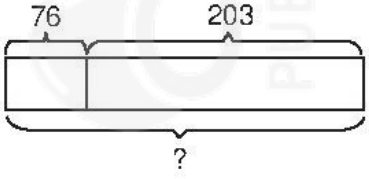
473 + 86 = 559
Ken delivered **559** copies of newspaper.

11.



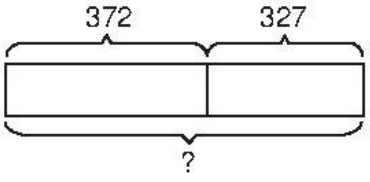
$384 + $86 = $470
She had **$470** at first.

12.



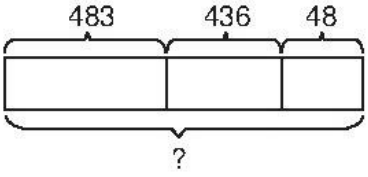
76 + 203 = 279
He had **279** postcards at first.

13.



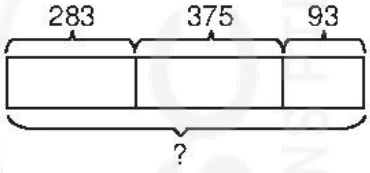
372 + 327 = 699
She had **699** cookies at first.

14.



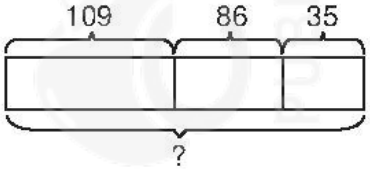
483 + 436 + 48 = 967
There are **967** people in the school altogether.

15.



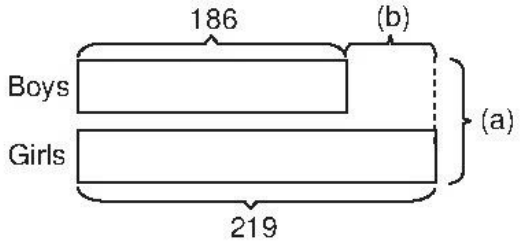
283 + 375 + 93 = 751
There are **751** fruits in Uncle Lam's shop altogether.

16.



109 + 86 + 35 = 230
Thomas sold **230** balloons altogether.

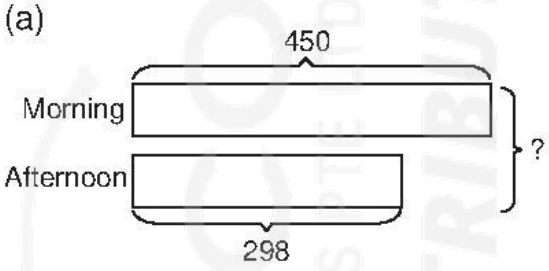
17.



(a) 186 + 219 = 405
There are **405** children altogether.

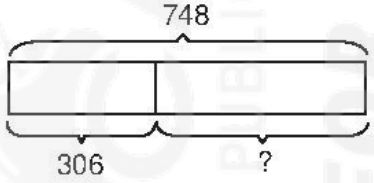
(b) 219 – 186 = 33
There are **33** more girls and boys.

18. (a)



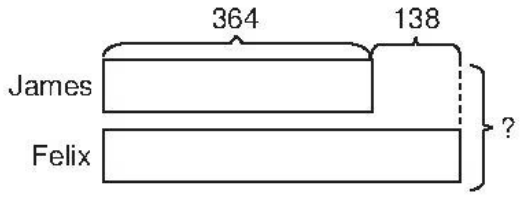
450 + 298 = 748
The bakery made **748** cupcakes altogether.

(b)



748 – 306 = 442
442 cupcakes were sold.

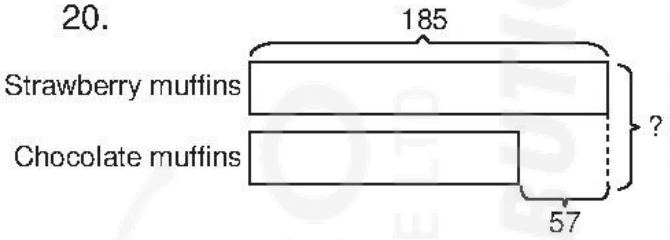
19.



364 + 138 = 502
Felix has 502 game cards.

364 + 502 = 866
They have **866** game cards altogether.

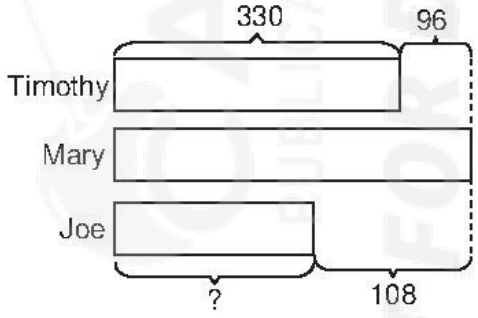
20.



185 − 57 = 128
She baked 128 chocolate muffins.

185 + 128 = 313
She baked **313** muffins altogether.

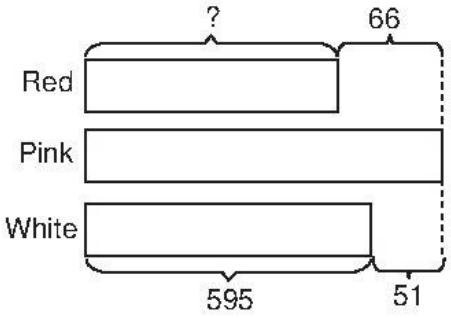
21.



330 + 96 = 426
Mary collected 426 badges.

426 − 108 = 318
Joe collected **318** badges.

22.



595 + 51 = 646
She has 646 pink beads.

646 − 66 = 580
She has **580** red beads.

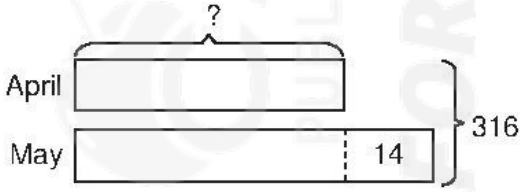
Challenge

Exercise 1

1. 820 − 456 = 364
There were 364 girls.

456 − 10 = 446 (Boys)
364 − 8 = 356 (Girls)
446 − 356 = 90
There were **90** more boys than girls left in Zheng Ya Primary School.

2.



2 units = 316 − 14
= 302 babies

302 = 151 + 151
1 unit = 151 babies
151 babies were born in April.

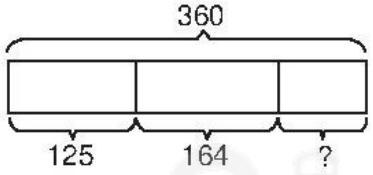
151 + 21 = 172
172 babies were born in June.

316 + 172 = 488
488 babies were born from April to June.

3. Work backwards.
800 − 250 = 550
550 + 385 = 935
He had **935** mangoes at first.

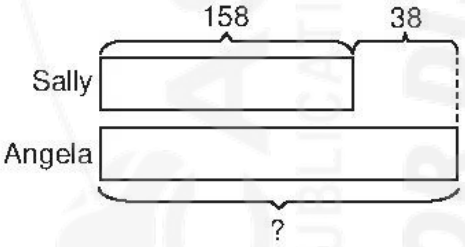
4. Work backwards.
186 − 7 = 179
179 + 24 = 203
203 people were watching the concert at first.

5.



125 + 164 = 289
360 − 289 = 71
They must collect **71** more presents.

6. 102 + 56 = 158
There were 158 plants in Sally's garden.



158 + 38 = 196
There were 196 plants in Angela's garden.

196 − 2 − 2 = 192
192 plants were left in her garden.

Unit 4 Multiplication And Division

Drills

Exercise 1

1. 2 groups of 4
= 4 + 4
= 2 × 4
= 8

2. 2 groups of 3
= 3 + 3
= 2 × 3
= 6

3. 3 groups of 5
= 5 + 5 + 5
= 3 × 5
= 15

4. 3 groups of 4
= 4 + 4 + 4
= 3 × 4
= 12

Exercise 2

1. 7 + 7 + 7 + 7 = **28**
4 × 7 = **28**
4 sevens = **28**

2. 10 + 10 + 10 = **30**
3 × 10 = **30**
3 tens = **30**

3. 5 groups of 8 = **40**
5 eights = **40**
5 × 8 = **40**

4. **4** groups of 6 = **24**
   4 sixes = **24**
   4 × 6 = **24**

Exercise 3

1. 3 groups of 2

2. 4 groups of 6

3. 4 groups of 3

4. 3 groups of 5

Exercise 4

1. 2 × 4 = 8
   8 ÷ 2 = 4

2. 3 × 6 = 18
   18 ÷ 3 = 6

3. 5 × 3 = 15
   15 ÷ 5 = 3

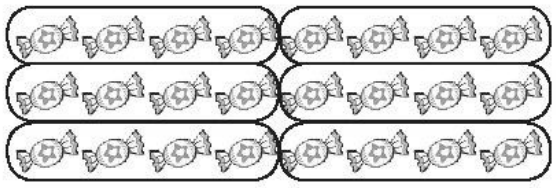
4. 2 × 6 = 12
   12 ÷ 2 = 6

Perform

Exercise 1

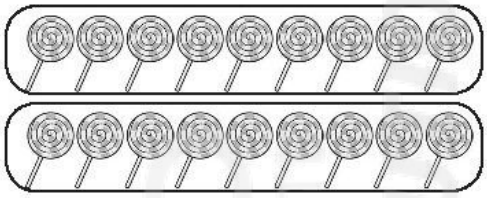
1. (3)
2. (2)
3. (4)
4. (3)
5. (1)
6. (4)
7. (2)

Exercise 2

1. 

24	÷	4	=	6

   There are **6** groups of 4 sweets.

2. 

18	÷	2	=	9

   There are **9** lollipops in each group.

Exercise 3

1. | 5 | × | 3 | = | 15 |
   |---|---|---|---|---|
2. | 3 | × | 4 | = | 12 |
   |---|---|---|---|---|

Exercise 4

1. | 12 | ÷ | 2 | = | 6 |
   |---|---|---|---|---|
   | 12 | ÷ | 6 | = | 2 |
   |---|---|---|---|---|

2. | 20 | ÷ | 4 | = | 5 |
   |---|---|---|---|---|
   | 20 | ÷ | 5 | = | 4 |
   |---|---|---|---|---|

Achieve

Exercise 1

1. 5 × 4 = 20

There are **20** cookies on 5 such plates.

2. 2 × 7 = 14

There are **14** pens in 2 such packets.

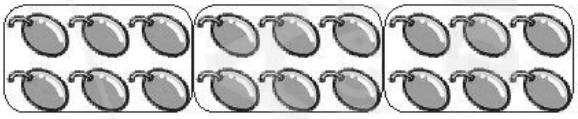
3. 3 × 5 = 15

She sews **15** buttons on 3 dresses.

4. 4 × 7 = 28

He has **28** marbles altogether.

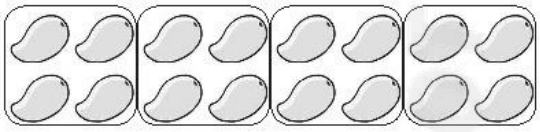
5.



18 ÷ 3 = 6

There are **6** plums in each bowl.

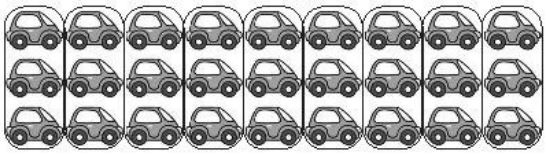
6.



16 ÷ 4 = 4

There were **4** mangoes in each bag.

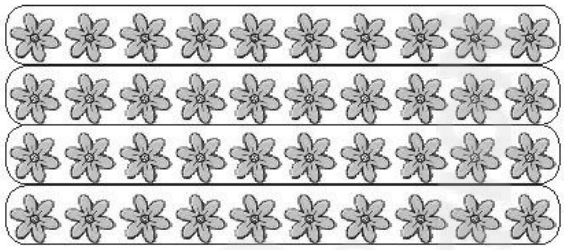
7.



27 ÷ 3 = 9

He gets **9** boxes of toy cars.

8.



40 ÷ 10 = 4

She needs **4** vases.

Challenge

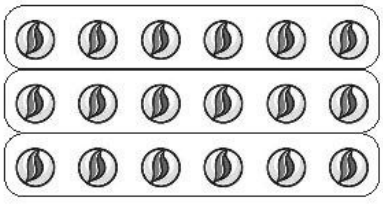
Exercise 1

1. 5 + 5 + 5 + 5 = 20

 = 5

 ×  = 5 × 5
= **25**

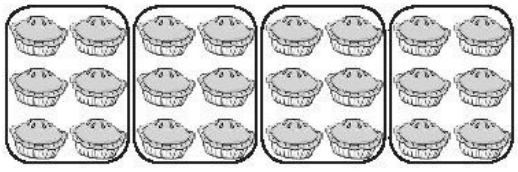
2. 11 + 7 = 18
Both boys have 18 marbles altogether.



18 ÷ 3 = 6

There are **6** marbles in each box.

3. 36 − 12 = 24
Lisa has 24 tarts left.



24 ÷ 4 = 6
Each friend got **6** tarts.

Unit 5 Multiplication Tables Of 2, 5 and 10

Drills

Exercise 1

1. 4 × 5 = 20
   20 ÷ 4 = 5

2. 3 × 10 = 30
   30 ÷ 3 = 10

3. 6 × 3 = 18
   18 ÷ 6 = 3

Exercise 2

1. 2, **4**, **6**, 8, **10**, **12**, 14, **16**, **18**, **20**

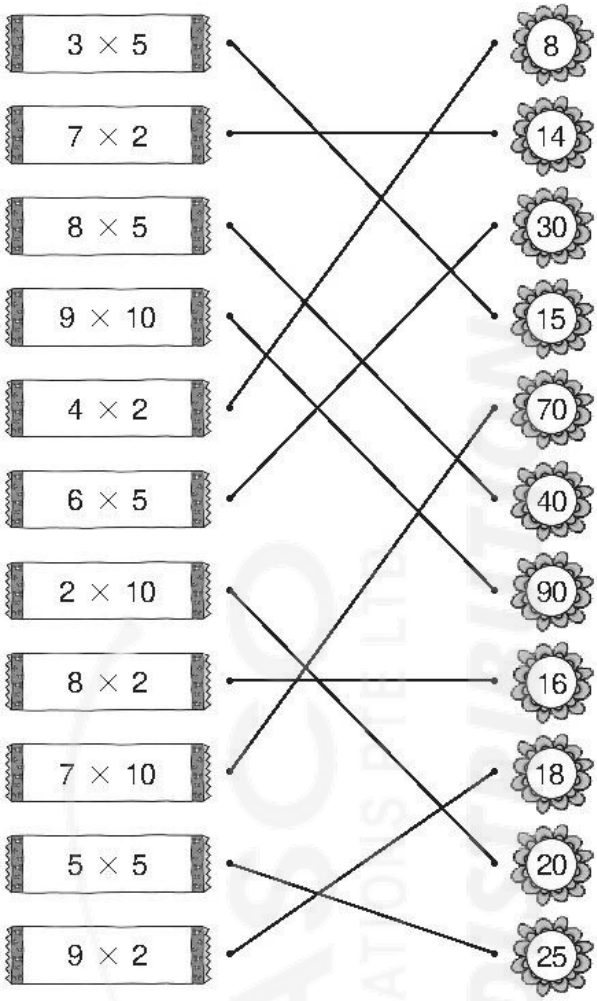
2. **5**, **10**, 15, **20**, 25, **30**, **35**, 40, **45**, **50**

3. **10**, 20, **30**, **40**, 50, **60**, **70**, 80, **90**, **100**

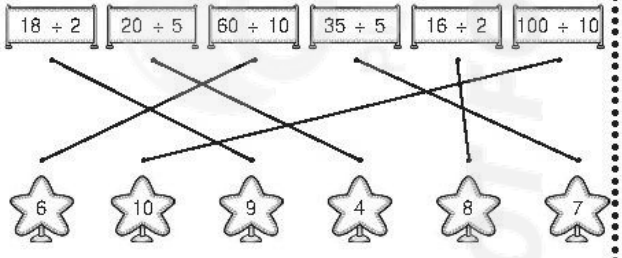
Exercise 3

1. 12	2. 6
3. 18	4. 10
5. 20	6. 35
7. 45	8. 60
9. 80	10. 100

Exercise 4



Exercise 5



Exercise 6

1. [4] × 2 = 8	2. [7] × 5 = 35
3. [7] × 10 = 70	4. 2 × [9] = 18
5. 5 × [4] = 20	6. [14] ÷ 2 = 7
7. [45] ÷ 5 = 9	8. [100] ÷ 10 = 10
9. [6] ÷ 2 = 3	10. [30] ÷ 5 = 6

Perform

Exercise 1

1. $\underbrace{20 \div 2}_{10} =$ [2] × 5	2. $\underbrace{16 \div 2}_{8} = 2 \times$ [4]
3. [12] ÷ 2 = $\underbrace{3 \times 2}_{6}$	4. $\underbrace{40 \div 5}_{8} =$ [4] × 2
5. $\underbrace{50 \div 5}_{10} =$ [2] × 5	6. [30] ÷ 5 = $\underbrace{3 \times 2}_{6}$
7. $\underbrace{80 \div 10}_{8} = 2 \times$ [4]	8. [100] ÷ 10 = $\underbrace{5 \times 2}_{10}$
9. $\underbrace{16 \div 2}_{8} =$ [6] + 2	10. $\underbrace{20 \div 5}_{4} =$ [7] − 3
11. 5 × [3] = $\underbrace{10 + 5}_{15}$	12. $\underbrace{10 \times 6}_{60} = 75 -$ [15]

Exercise 2

1. (3)
2. (4)
3. (1)
4. (2)
5. (3)
6. (3)
7. (4)
8. (3)
9. (2)
10. (2)

Exercise 3

1. 9 × 5 = 45
   5 × 9 = 45

2. 16 ÷ 2 = 8
   16 ÷ 8 = 2

3. 10 × 5 = 50
   50 ÷ 10 = 5

   OR

   5 × 10 = 50
   50 ÷ 5 = 10

Achieve

Exercise 1

1. 6 × 2 = 12
   There are **12** apples in all.

2. 4 × 5 = 20
   There are **20** oranges altogether.

3. 3 × 10 = 30
   There were **30** tarts altogether.

4. 90 ÷ 10 = 9
   Each child receives **9** muffins.

5. 60 ÷ 10 = 6
   She can make **6** bracelets.

6. 15 ÷ 5 = 3
   There were **3** pens in each box.

7. 10 × 10 = 100
   He packs **100** mangoes altogether.

8. 14 ÷ 2 = 7
   Amy gets **7** chocolates.

9. 7 × 5 = 35
   She needs **35 hours** to read 7 such books.

10. 70 ÷ 10 = 7
    There were **7** eggs in each carton.

11. 9 × $2 = $18
    She spent **$18** on the hairpins.

12. 45 ÷ 5 = 9
    Each boy receives **9** bars of chocolates.

13. 8 × 10 = 80
    Justin collected **80** stickers.

14. 7 × 2 = 14
    She sews **14** skirts in a week.

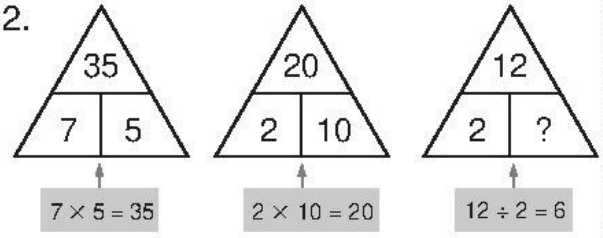
Challenge

Exercise 1

1. 4 × 5 = 20
   Michael has 20 apples.

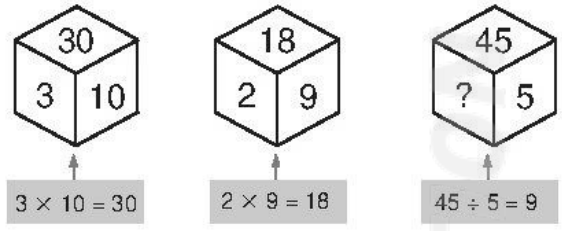
   20 ÷ 2 = 10
   There are **10** apples in each of Alan's baskets.

2.



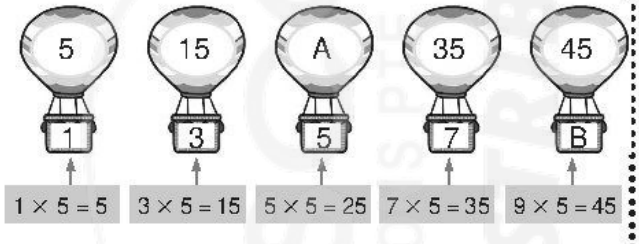
The missing number is **6**.

3.



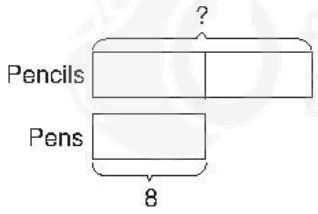
The missing number is **9**.

4.



A = **25** and B = **9**.

5. 5 + 3 = 8
Marc has 8 pens.



1 unit = 8 items
2 units = 2 × 8
= 16 items

Marc has **16** pencils.

6. 54 – 24 = 30
Pauline had 30 dumplings left.

30 ÷ 5 = 6
Each friend got **6** dumplings.

Unit 6 Multiplication Tables Of 3 and 4

Drills

Exercise 1

1. 5 × 3 = 15
15 ÷ 5 = 3

2. 6 × 4 = 24
24 ÷ 6 = 4

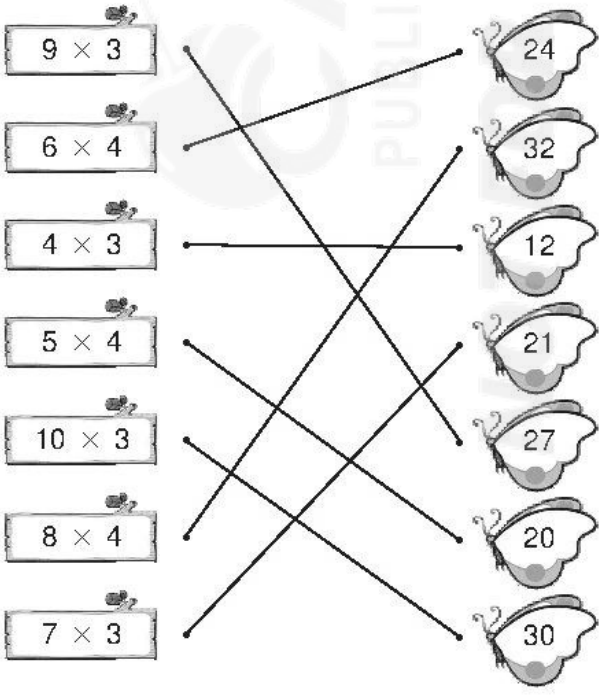
3. 7 × 3 = 21
21 ÷ 7 = 3

Exercise 2

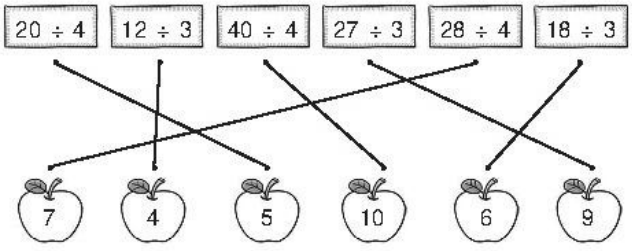
1. **3**, 6, **9**, **12**, 15, **18**, 21, **24**, **27**, **30**

2. 4, **8**, 12, **16**, **20**, **24**, **28**, 32, **36**, **40**

Exercise 3



Exercise 4

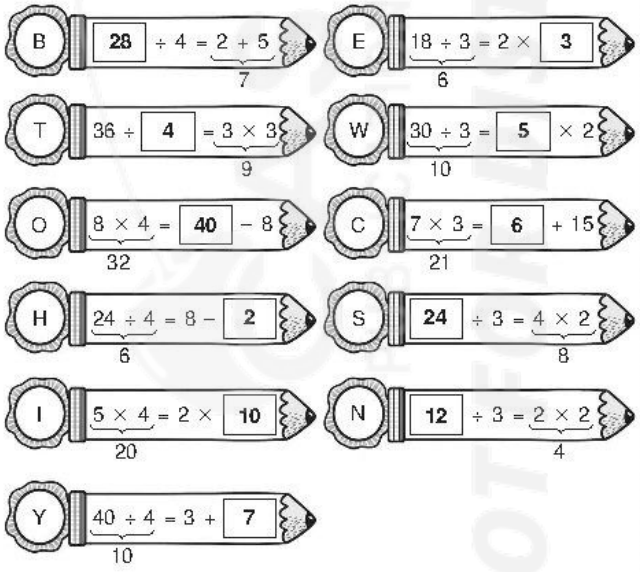


Exercise 5

1. 21
2. 24
3. 15.
4. 32
5. 9
6. 6
7. 5
8. 10
9. 40
10. 27

Perform

Exercise 1



O	**N**	**C**	**E**		**B**	**I**	**T**	**T**	**E**	**N**
40	12	6	3		28	10	4	4	3	12

T	**W**	**I**	**C**	**E**	**S**	**H**	**Y**
4	5	10	6	3	24	2	7

Exercise 2

1. (1)
2. (2)
3. (4)
4. (2)
5. (1)
6. (2)
7. (1)

Exercise 3

1. 9 × 4 = 36
   4 × 9 = 36
2. 21 ÷ 3 = 7
   21 ÷ 7 = 3

Achieve

Exercise 1

1. 8 × 4 = 32
   He packs **32** pears altogether.
2. 6 × 3 = 18
   She buys **18** tarts altogether.
3. 28 ÷ 4 = 7
   Each girl gets **7** stickers.
4. 27 ÷ 3 = 9
   He gets **9** bags of yo-yos.
5. 4 × 9 = 36
   There are **36** rulers in all.

6. $21 \div 3 = 7$
Each child receives **7** slices of cake.

7. $8 \times 3 = 24$
There are **24** durians altogether.

8. $5 \times 4 = 20$
There are **20** roses altogether.

9. $24 \div 3 = 8$
Each child gets **8** hairpins.

Challenge

Exercise 1

1.

2	5	3	30
3	1	4	12
2	4	3	24
3	3	2	?

$2 \times 5 \times 3 = 10 \times 3 = 30$

$3 \times 1 \times 4 = 3 \times 4 = 12$

$2 \times 4 \times 3 = 8 \times 3 = 24$

$3 \times 3 \times 2 = 9 \times 2 = 18$

The missing number is **18**.

2.

15	5	4	12
40	10	4	16
32	4	5	40
?	5	4	28

$15 \div 5 \times 4 = 3 \times 4 = 12$

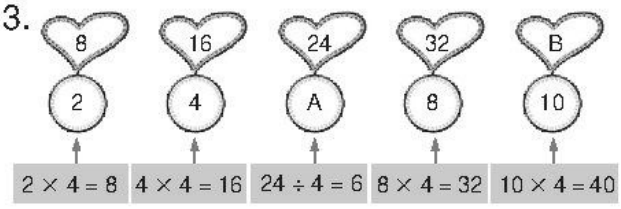
$40 \div 10 \times 4 = 4 \times 4 = 16$

$32 \div 4 \times 5 = 8 \times 5 = 40$

$? \div 5 \times 4 = 28$
$28 \div 4 = 7$
$7 \times 5 = 35$

The missing number is **35**.

3.



A = **6** and B = **40**.

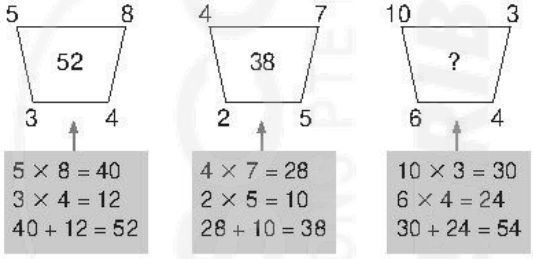
4. $4 + 4 + 4 + 4 = 16$

 = 4

 × 4 = 36

 = 36 ÷ 4
= **9**

5.



The missing number is **54**.

6. Multiplication table of 4:

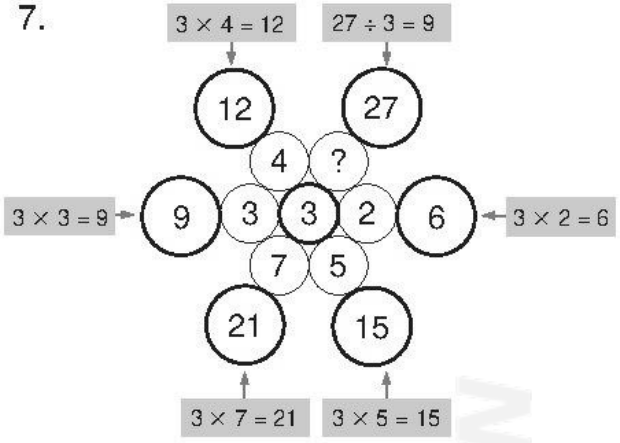
4, 8, 12, 16, (20), 24

Multiplication table of 5:

5, 10, 15, (20), 25

The number is **20**.

7.



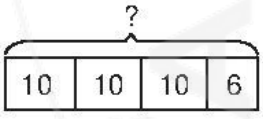
The missing number is **9**.

8. Use guess and check.

Value of 	1	2	3
	1 × 1 = 1	2 × 2 = 4	3 × 3 = 9
	1 + 1 + 1 = 3	2 + 2 + 2 = 6	3 + 3 + 3 = 9

The value of  is **3**.

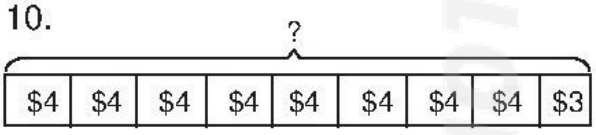
9.



3 × 10 = 30
30 + 6 = 36

She had **36** sweets at first.

10.



8 × $4 = $32
$32 + $3 = $35

She had **$35** at first.

Unit 7 Solving Word Problems Involving Multiplication And Division

Achieve

Exercise 1

1. 40 ÷ 5 = 8
She used **8** containers altogether.

2. 3 × 8 = 24
There are **24** marbles altogether.

3. 20 ÷ 4 = 5
Xiao Jing can make **5** squares.

4. 2 × 10 = 20
Michael buys **20** fish balls.

5. 21 ÷ 3 = 7
There were **7** green beans in each cup.

6. 4 × 10 = 40
Linda reads **40** pages in 4 days.

7. 27 ÷ 3 = 9
Kendrick wrote **9** words on each page.

8. 6 × 5 = 30
Michelle puts **30** sweets into the 6 packets.

9. 32 ÷ 4 = 8
Each girl receives **8** muffins.

10. $7 \times 5 = 35$
There are **35** boys at the badminton court.

11. $\$14 \div \$2 = 7$
Isaac buys **7** pens.

12. $9 \times 10 = 90$
90 beads are needed to make 9 bracelets.

13. (a) $84 - 48 = 36$
She had **36** curry puffs left.
(b) $36 \div 4 = 9$
There were **9** curry puffs in each box.

14. (a) $2 \times 10 = 20$
She buys **20** candy canes altogether.
(b) $20 \div 5 = 4$
She gets 4 bags of candy canes.

15. (a) $4 \times 6 = 24$
Joe buys **24** doughnuts altogether.
(b) $24 \div 3 = 8$
He gets **8** plates of doughnuts.

Challenge

Exercise 1

1. $4 \times 4 = 16$
He put 16 guppies in 4 fish bowls.

$18 - 16 = 2$
There are **2** guppies in the last fish bowl.

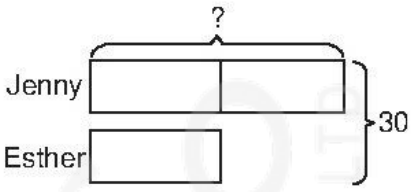
2. $4 \times 5 = 20$
Jean gave 20 stickers to her sisters.

$31 - 20 = 11$
Jean had **11** stickers left.

3. $2 \times 8 = 16$
Kumar arranged 16 stamps on 2 pages.

$16 + 7 = 23$
Howard gave **23** stamps to Kumar.

4.



3 units = 30 pineapple tarts
1 unit = $30 \div 3$
= 10 pineapple tarts
2 units = 2×10
= 20 pineapple tarts

Jenny baked **20** pineapple tarts.

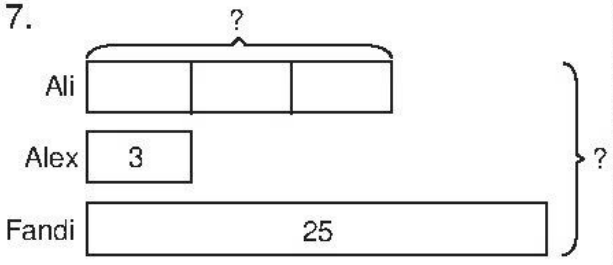
5. $5 \times 8 = 40$
There were 40 lollipops.

$40 - 3 - 2 - 2 = 33$
Fatimah had **33** lollipops left.

6. $3 \times 8 = 24$
Mrs Lim had 24 roses.

$24 - 8 = 16$
Mrs Lim had **16** roses left.

7.



$3 \times 3 = 9$
Ali has 9 marbles.

$9 + 3 + 25 = 37$
The three boys have **37** marbles altogether.

8. Groups of 4: 4, 8, (12), 16, 20, 24, 28, (32)

Groups of 5 + 2: 7, (12), 17, 22, 27, (32)

Groups of 10 + 2: (12), 22, (32)

She baked **32** cupcakes.

Unit 8 Length And Mass

Drills

Exercise 1

1. m
2. m
3. cm
4. m
5. cm

Exercise 2

1. g
2. kg
3. g
4. kg
5. g

Exercise 3

1. 250 cm, 205 cm, 52 cm, 25 cm
2. 968 cm, 860 cm, 806 cm, 86 cm

Exercise 4

1. 250 g, 530 g, 720 g, 925 g
2. 40 kg, 86 kg, 93 kg, 100 kg

Exercise 5

1. (a) 4 (b) 13 (c) 9 (d) 17
2. (a) 5 (b) 6 (c) 12 (d) A (e) C (f) 7 (g) 23

Exercise 6

1. (a) 11 (b) 8 (c) 3

2. X ——————————————————— Y

Exercise 7

1. (a) 430 (b) 370
   (c) 60 (d) 800

2. (a) 250 (b) 900
   (c) 650 (d) 500

3. (a) 3 (b) 8
   (c) 2 (d) 6
   (e) 5 (f) 11

Perform

Exercise 1

1. 503 + 102 = 405 + 200
   = **605 cm**

   405 98

2. 43 + 39 = 42 + 40
   = **82 m**

   42 1

3. 673 + 293 = 666 + 300
   = **966 cm**

   666 7

4. 98 + 46 = 94 + 50
   = **144 m**

   94 4

Exercise 2

1. 700 − 365 = 300 + 35
   = **335 cm**

   300 400

2. 61 − 29 = 31 + 1
   = **32 m**

   31 30

3. 536 − 197 = 336 + 3
   = **339 cm**

   336 200

4. 34 − 29 = 4 + 1
   = **5 m**

   4 30

5. 635 − 495 = 135 + 5
   = **140 cm**

   135 500

Exercise 3

1. 476 + 283 = 459 + 300
   = **759 g**

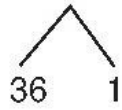
   459 17

2. 38 + 12 = 30 + 20
   = **50 kg**

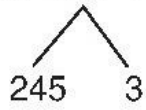
   30 8

3. 576 + 394 = 570 + 400
   = **970 g**

   570 6

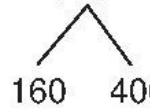
4. 37 + 9 = 36 + 10


= **46 kg**

5. 248 + 37 = 245 + 40


= **285 g**

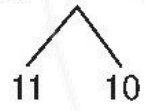
Exercise 4

1. 560 − 394 = 160 + 6


= **166 g**

2. 68 − 39 = 28 + 1


= **29 kg**

3. 21 − 6 = 11 + 4


= **15 kg**

4. 986 − 484 = 486 + 16


= **502 g**

5. 47 − 8 = 37 + 2


= **39 kg**

Exercise 5

1. 7 × 4 cm = 28 cm
The length of 1 hammer is 28 cm.

28 cm + 28 cm = 56 cm
The total length of 2 such hammers is **56 cm**.

2. (a) 896 m − 317 m = 579 m
Wendy's house is **579 m** from the market.

(b) 579 m − 317 m = 262 m
Wendy's house is **262 m** further from the market than Sam's house.

Exercise 6

1. 470 g − 320 g = 150 g
The mass of the mango is **150 g**.

2. 450 g − 160 g = 290 g
The mass of the cabbage is **290 g**.

3. 30 g + 30 g + 30 g + 30 g = 120 g
The mass of 1 vase is 120 g.

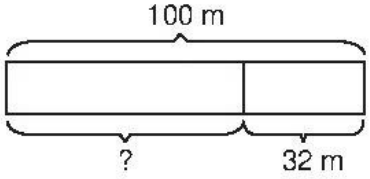
120 g + 120 g = 240 g
The mass of the jug is **240 g**.

4. 50 g + 50 g + 50 g = 150 g
150 g − 15 g = 135 g
The mass of the box is **135 g**.

Achieve

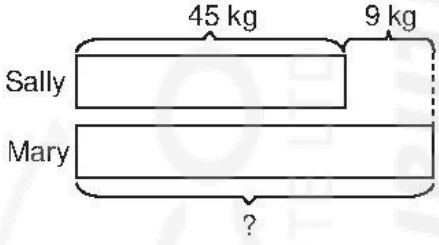
Exercise 1

1.



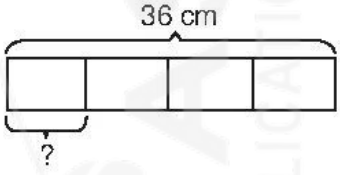
100 m – 32 m = 68 m
The length of the other piece is **68 m**.

2.



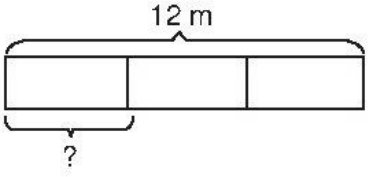
45 kg + 9 kg = 54 kg
Mary's mass is **54 kg**.

3.



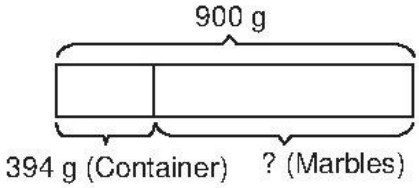
36 cm ÷ 4 = 9 cm
The length of each piece of string is **9 cm**.

4.



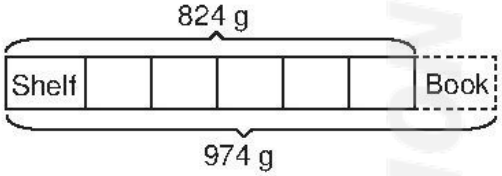
12 m ÷ 3 = 4 m
The length of Jack's ladder is **4 m**.

5.



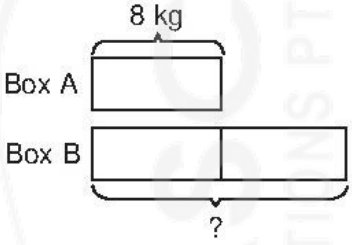
900 g – 394 g = 506 g
The mass of the marbles is **506 g**.

6.



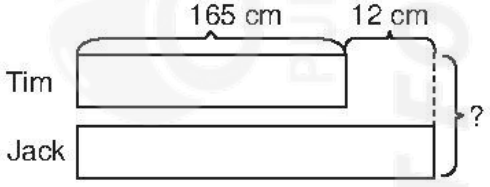
974 g – 824 g = 150 g
The mass of the book that was added was **150 g**.

7.



2 × 8 kg = 16 kg
The mass of Box B is **16 kg**.

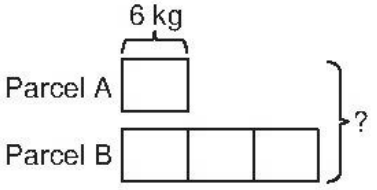
8.



165 cm + 12 cm = 177 cm
Jack is 177 cm tall.

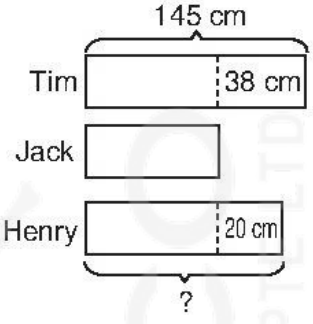
165 cm + 177 cm = 342 cm
Their total height is **342 cm**.

9.



1 unit = 6 kg
4 units = 4 × 6 kg
= 24 kg
The total mass of both parcels is **24 kg**.

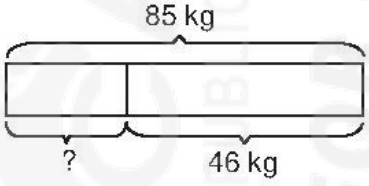
10.



145 cm − 38 cm = 107 cm
Jack is 107 cm tall.

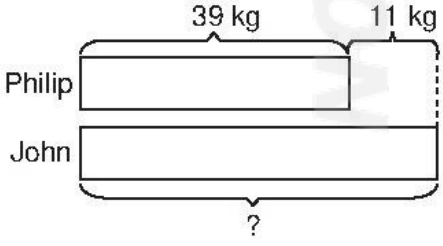
107 cm + 20 cm = 127 cm
Henry is **127 cm** tall.

11. (a)



85 kg − 46 kg = 39 kg
Philip's mass is **39 kg**.

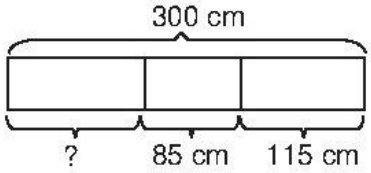
(b)



39 kg + 11 kg = 50 kg
John's mass is **50 kg**.

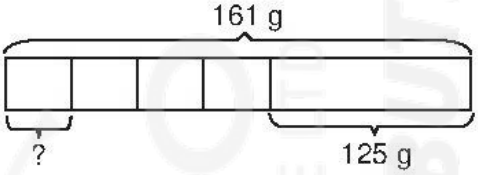
12. 301 m + 268 m = 569 m
569 m + 426 m = 995 m
She walked **995 m** altogether.

13.



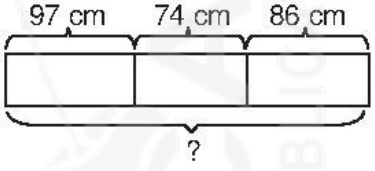
115 cm + 85 cm = 200 cm
300 cm − 200 cm = 100 cm
The length of the ribbon left was **100 cm**.

14.



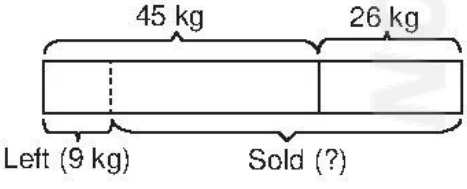
4 units = 161 g − 125 g
= 36 g
1 unit = 36 g ÷ 4
= 9 g
The mass of each sweet is **9 g**.

15.



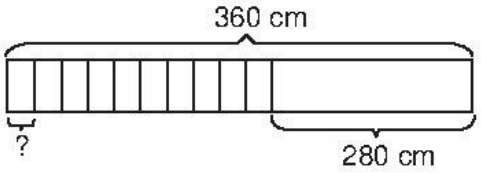
97 cm + 74 cm = 171 cm
171 cm + 86 cm = 257 cm
The length of the ribbon before it was cut was **257 cm**.

16.



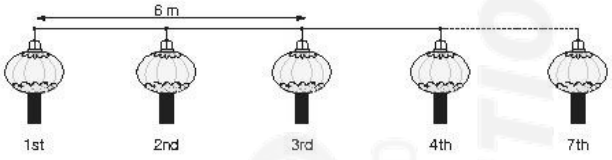
45 kg + 26 kg = 71 kg
71 kg − 9 kg = 62 kg
The mass of potatoes he sold was **62 kg**.

17.



360 cm − 280 cm = 80 cm
80 cm ÷ 10 = 8 cm
The length of each shorter piece of string was **8 cm**.

18.



Distance between 2 consecutive lanterns
= 6 m ÷ 2
= 3 m

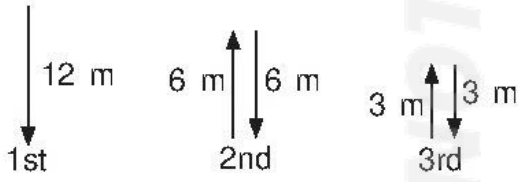
Distance between 1st and 7th lantern
= 6 × 3 m
= 18 m

The distance between the 1st and the 7th lantern was **18 m**.

Challenge

Exercise 1

1.



12 m + (6 m + 6 m) + (3 m + 3 m)
= 12 m + 12 m + 6 m
= 30 m
The total distance the ball had travelled just when it hit the ground for the 3rd time was **30 m**.

2. Mass of 1 packet of rice
= 14 kg ÷ 2
= 7 kg

Mass of 3 packets of rice
= 3 × 7 kg
= 21 kg

Mass of 1 packet of flour
= 6 kg ÷ 3
= 2 kg

Mass of 5 packets of flour
= 5 × 2 kg
= 10 kg

21 kg + 10 kg = 31 kg

The total mass of 3 packets of rice and 5 packets of flour is **31 kg**.

3. B + B + B = 27 kg − 3 kg
= 24 kg
B = 24 kg ÷ 3
= 8 kg

A + A + B = 30 kg − 4 kg
= 26 kg

A + A + 8 kg = 26 kg
A + A = 26 kg − 8 kg
= 18 kg
A = 18 kg ÷ 2
= 9 kg

A + C + C = 23 kg
9 kg + C + C = 23 kg
C + C = 23 kg − 9 kg
= 14 kg
C = 14 kg ÷ 2
= 7 kg

The mass of Box C is **7 kg**.

Unit 9 Money

Drills

Exercise 1

1. $14.40
   Fourteen dollars and forty cents

2. $7.50
   Seven dollars and fifty cents

3. $25.25
   Twenty-five dollars and twenty-five cents

4. $20.20
   Twenty dollars and twenty cents

Exercise 2

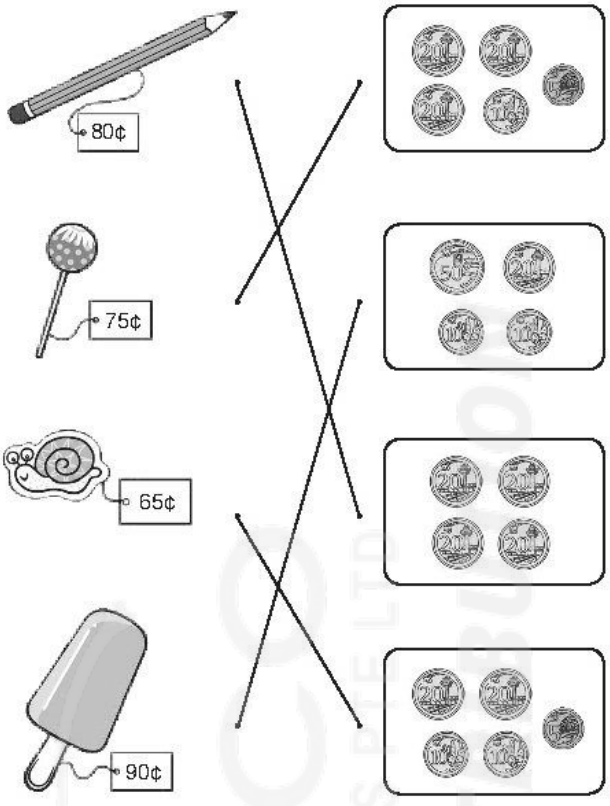
1. $55.85

2. $39.50

3. $76.70

4. $71.80

Exercise 3



Exercise 4

1. $0.30	2. $0.65
3. $0.90	4. $0.05
5. $0.62	6. $0.38
7. $0.10	8. $0.83
9. $0.94	10. $0.89

Exercise 5

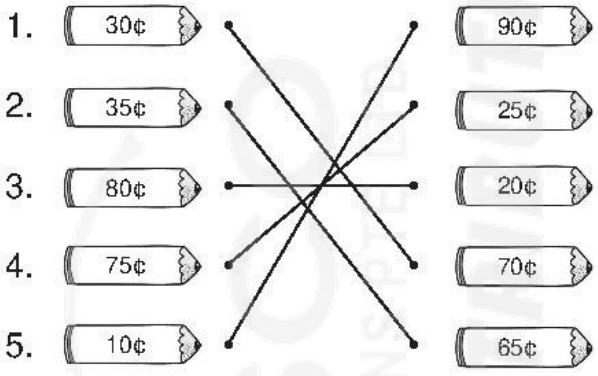
1. 120¢	2. 400¢
3. 785¢	4. 930¢
5. 1205¢	6. 2400¢
7. 3595¢	8. 6315¢
9. 8100¢	10. 6005¢

Exercise 6

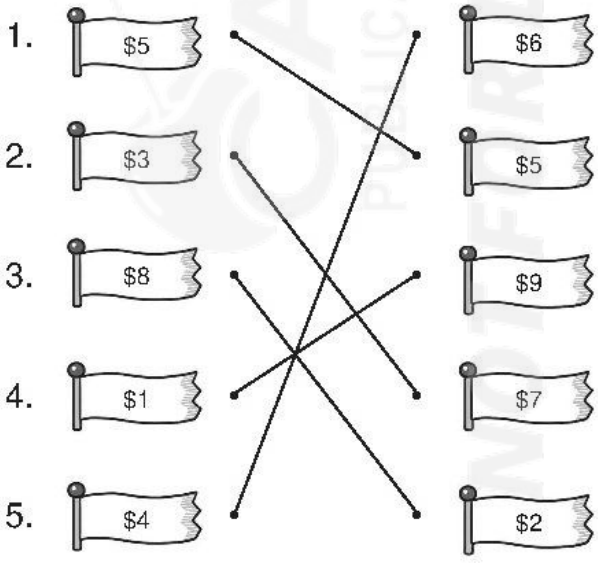
1. 5
2. 5
3. 10
4. 12
5. 10
6. $0.50
7. $1
8. $3.50
9. $1
10. $4
11. $50

Perform

Exercise 1



Exercise 2



Exercise 3

1. (a) $32.40, $34.20, $23.40

   (b) $17.40, $14.70, $71.40

2. (a) $9.10, $1.90, $19.10

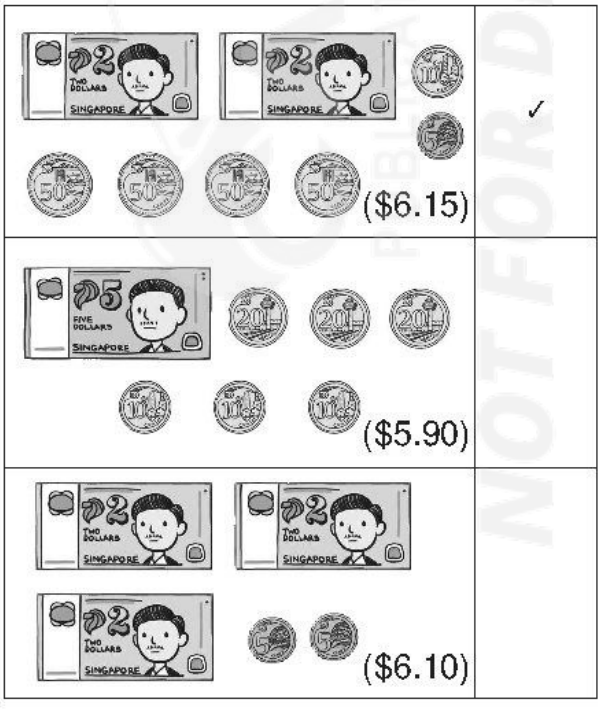
   (b) $28.30, $83.20, $32.80

3. (a) Lisa
   (b) Joshua

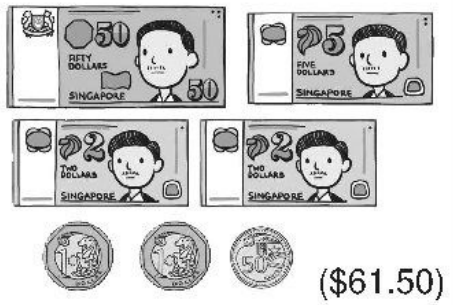
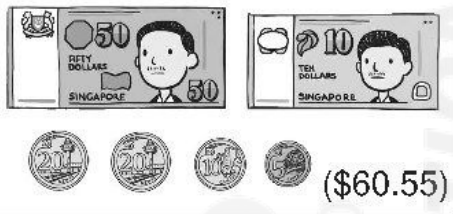
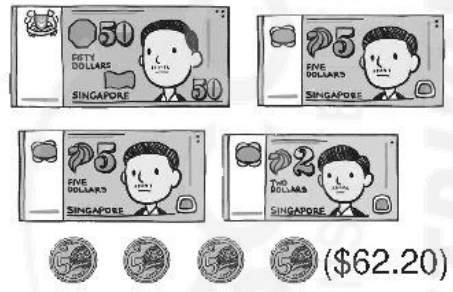
4. (a) Siva
   (b) Nora

Exercise 4

1.



2.

 ($61.50)	
 ($60.55)	✓
 ($62.20)	

Exercise 5

1. $1 − 45¢ = **$0.55**
2. $10 + $2 + $6 = **$18**
3. $15 + $2 + $3 = **$20**
4. $54 − $10 = **$44**
5. $65 − $36 = **$29**

Exercise 6

T-shirt Knapsack Cap

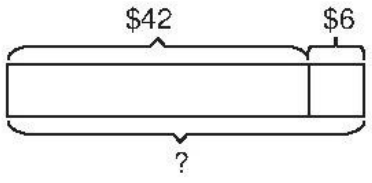
$18 + $25 + $7 = $50

He bought a **T-shirt**, a **knapsack** and a **cap**.

Achieve

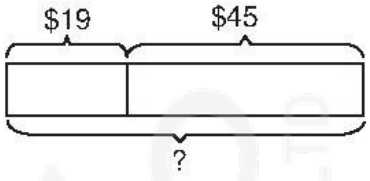
Exercise 1

1.



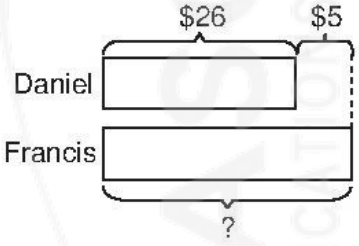
$42 + $6 = $48
He had **$48** at first.

2.



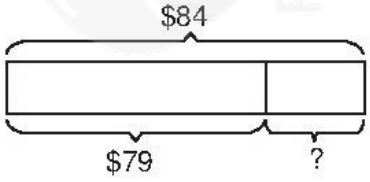
$19 + $45 = $64
She spent **$64** altogether.

3.



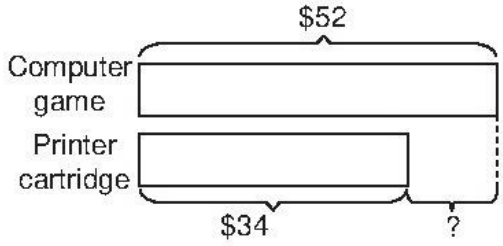
$26 + $5 = $31
Francis spent **$31**.

4.



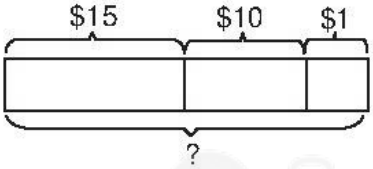
$84 − $79 = $5
She needs **$5** more.

5.



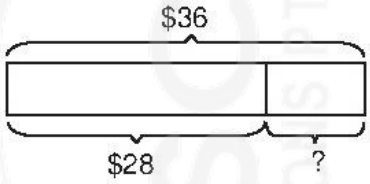
$52 − $34 = $18
He spent **$18** more on the computer game.

6.



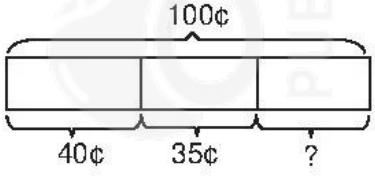
$15 + $10 + $1 = $26
He spent **$26** in all.

7.



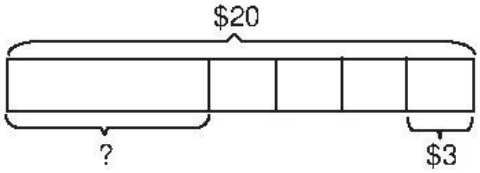
Joe has $28.
$36 − $28 = $8
He needs **$8** more.

8.



40¢ + 35¢ = 75¢
100¢ − 75¢ = 25¢
She had **25¢** left.

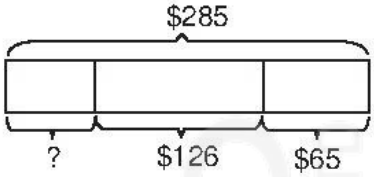
9.



4 × $3 = $12
$20 − $12 = $8
She had **$8** left.

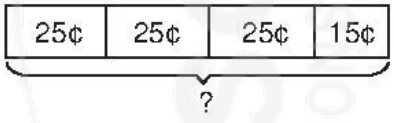
10. $70 ÷ $10 = 7
He bought **7** handkerchiefs.

11.



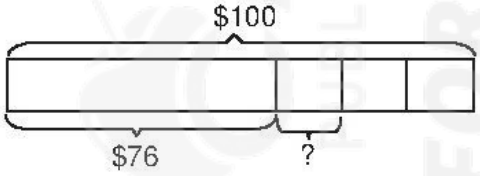
$126 + $65 = $191
$285 − $191 = $94
He had **$94** left.

12.



25¢ + 25¢ + 25¢ + 15¢ = 90¢
Tom had **90¢** at first.

13.



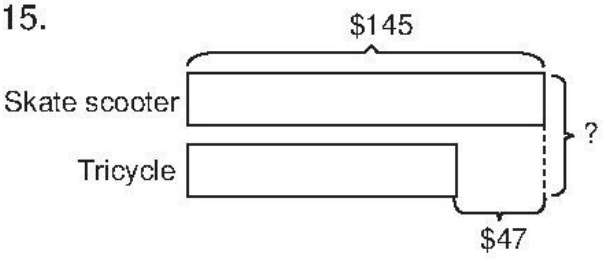
$100 − $76 = $24
The 3 T-shirts cost **$24** altogether.

$24 ÷ 3 = $8
Each T-shirt cost **$8**.

14. 20 ÷ 4 = 5
She bought 5 sets of 4 apples.

5 × $3 = $15
She paid **$15** for the apples.

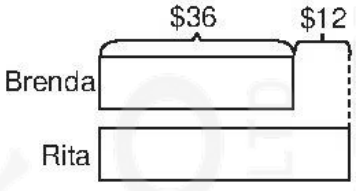
15.



$145 − $47 = $98
The tricycle costs $98.

$145 + $98 = $243
Both items cost **$243** altogether.

16.



$36 + $12 = $48
Rita saved $48.

$36 + $48 = $84
Both of them saved **$84** altogether.

17. (a) $35 − $8 = $27
The pens cost **$27** altogether.

(b) $27 ÷ $3 = 9
Ahmad bought **9** pens.

18. (a) $50 − $18 = $32
The 4 bowls cost **$32** altogether.

(b) $32 ÷ 4 = $8
Each bowl cost **$8**.

19. (a) $8 ÷ $2 = 4
He bought 4 sets of 3 toy cars.

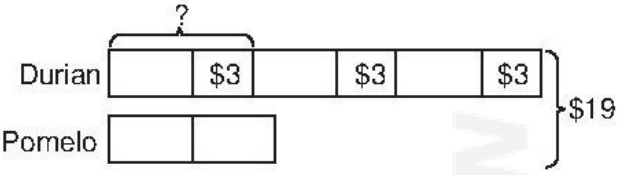
4 × 3 = 12
He bought **12** toy cars.

(b) $35 ÷ $5 = 7
He bought **7** toy aeroplanes.

Challenge

Exercise 1

1. durian + durian + durian + pomelo + pomelo = $19



3 × $3 = $9
5 units = $19 − $9
= $10
1 unit = $10 ÷ 5
= $2
$2 + $3 = $5

A  costs **$5**.

2. Use guess and check.

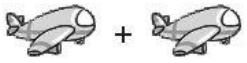
Number of $1 coins	Value of $1 coins	Number of $5 notes	Value of $5 notes	Total value	Check
5	5 × $1 = $5	5	5 × $5 = $25	5 + $25 = $30	✗
④	4 × $1 = $4	6	6 × $5 = $30	$4 + $30 = $34	✓

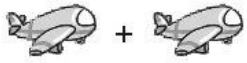
I have **4** one-dollar coins.

3.  = $9

 = $9 ÷ 3
= $3

 = $13

$3 +  = $13

 = $13 − $3
= $10

 = $10 ÷ 2
= $5

 +  +  = $14

$3 +  + $5 = $14

 = $14 − $3 − $5
= $6

 +  +  = $11

$3 +  + $6 = $11

 = $11 − $3 − $6
= **$2**

4. **$60** ⊕ **$19** ⊖ **$24** = $55

$60 + $19 = $79
$79 − $24 = $55

5. (a) Joseph has $9.
Mary has $8.50.
$9 − $8.50 = $0.50
Joseph has **$0.50** more than Mary.

(b) $9 + $8.50 = $17.50
Both of them have **$17.50** altogether.

6. 10 × $5 = $50
Mrs Leong had $50.

3 × $10 = $30
Mrs Leong gave $30 to her daughters.

$50 − $30 = $20
Mrs Leong had **$20** left.

7. Use guess and check.

Number of $3 books	Cost of $3 books	Number of $4 books	Cost of $4 books	Total value	Check
3	3 × $3 = $9	5	5 × $4 = $20	$9 + $20 = $29	✗
2	2 × $3 = $6	(6)	6 × $4 = $24	$6 + $24 = $30	✓

He bought **6** books that cost $4.

8. 9 × $5 = $45
Vasu saved $45.

$45 − $8 − $15 = $22
Vasu would have **$22** left.

9. Make a list.

No. of one-dollar coins	Value	No. of fifty-cent coins	Value	Total value
1	1 × $1 = $1	1	1 × 50¢ = 50¢	$1.50
...		...		
10	10 × $1 = $10	10	10 × 50¢ = $5	$15
11	11 × $1 = $11	11	11 × 50¢ = $5.50	$16.50
12	12 × $1 = $12	12	12 × 50¢ = $6	$18
13	13 × $1 = $13	13	13 × 50¢ = $6.50	$19.50
14	14 × $1 = $14	14	14 × 50¢ = $7	$21

She has **14** one-dollar coins and **14** fifty-cent coins.

Unit 10
Two-Dimensional and Three-Dimensional Figures

Drills

Exercise 1

Square	Rectangle	Triangle	Circle	Semi-circle	Quarter circle
C	A	B	D	E	F

Exercise 2

1.

Straight Lines	Curves
4	2

2.

Straight Lines	Curves
3	2

3.

Straight Lines	Curves
5	3

4.

Straight Lines	Curves
2	4

Exercise 3

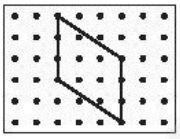
1. **3** triangles
   3 semicircles
   2 quarter circles

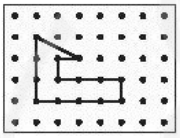
2. **3** circles
   4 rectangles
   3 triangles
   2 semicircles

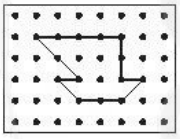
3. **4** circles
   2 rectangles
   5 semicircles
   2 quarter circles

4. **2** triangles
   4 squares
   4 quarter circles
   2 semicircles

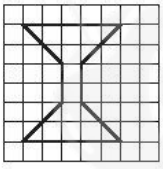
Exercise 4

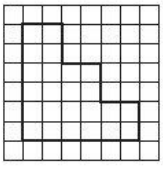
1. 

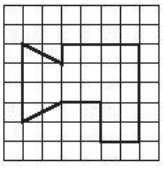
2. 

3. 

Exercise 5

1. 

2. 

3. 

Exercise 6

Cube	Cuboid	Cone	Cylinder	Sphere
C	B	E	D	A

Exercise 7

1.

Flat faces	Curved faces
2	1

2.

Flat faces	Curved faces
5	0

3.

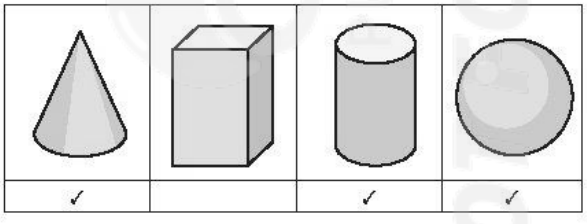
Flat faces	Curved faces
6	0

4.

Flat faces	Curved faces
1	1

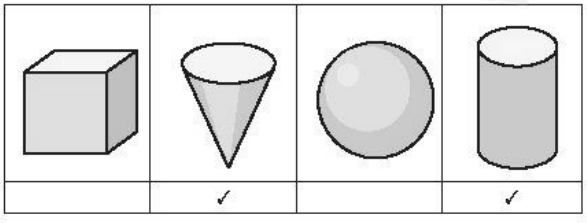
Exercise 8

1.



✓		✓	✓

2.

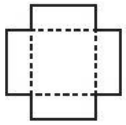


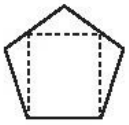
	✓		✓

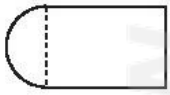
Perform

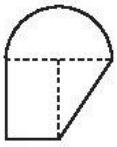
Exercise 1

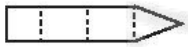
1. 

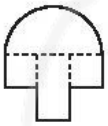
2. 

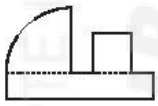
3. 

4. 

5. 

6. 

7. 

8. 

Exercise 2

1.

Flat faces	Curved faces
2	1

2.

Flat faces	Curved faces
5	0

3.

Flat faces	Curved faces
0	1

4.

Flat faces	Curved faces
4	1

Exercise 3

1.

Cuboid	Cube
2	4

2.

Cone	Cylinder
1	3

3.

Cuboid	Cylinder	Cube
2	1	3

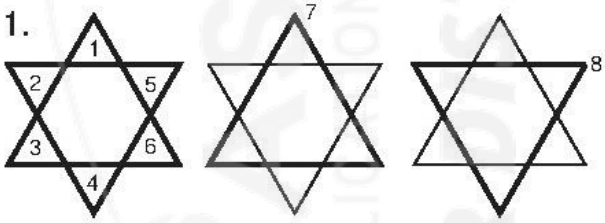
4.

Cone	Cylinder	Cube
2	6	4

Achieve

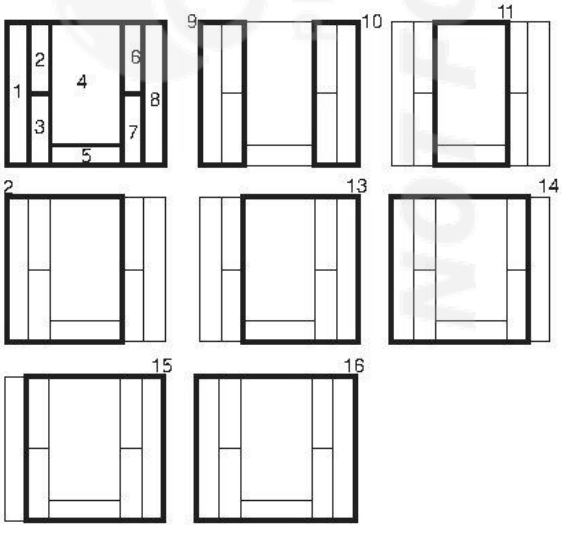
Exercise 1

1.



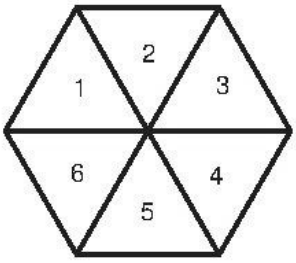
There are **8** triangles in the figure.

2.



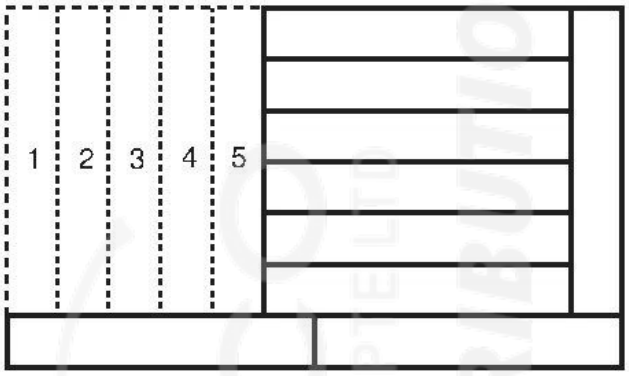
There are **16** rectangles in the figure.

3.



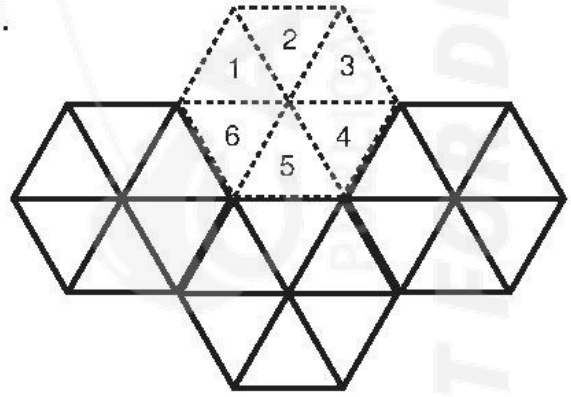
There are **6** triangles in the figure.

4.



To complete the figure, I should use **5** more such rectangles.

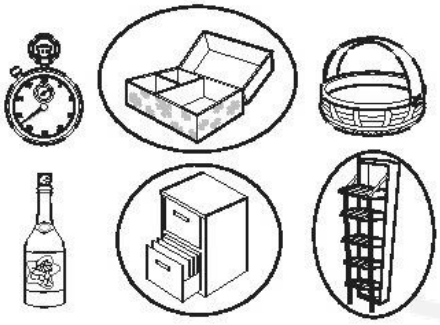
5.



To complete the figure, I should use **6** more such triangles.

Exercise 2

1.



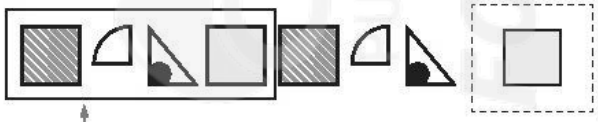
2.

Exercise 3

1.

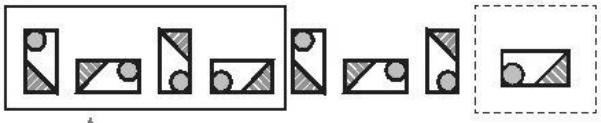
These 3 shapes repeat to form the pattern.

2.



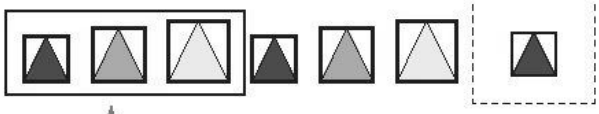
These 4 shapes repeat to form the pattern.

3.



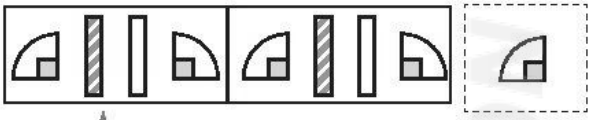
These 4 shapes repeat to form the pattern.

4.



These 3 shapes repeat to form the pattern.

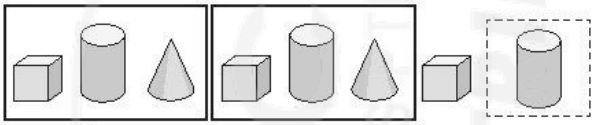
5.



These 4 shapes repeat to form the pattern.

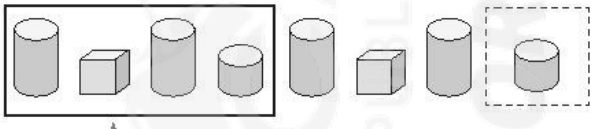
Exercise 4

1.



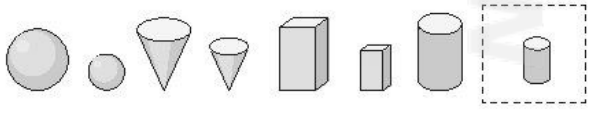
These 3 solids repeat to form the pattern.

2.

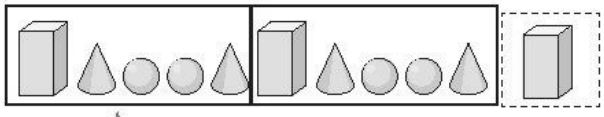


These 4 solids repeat to form the pattern.

3.

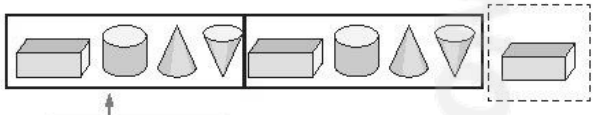


4.



These 5 solids repeat to form the pattern.

5.

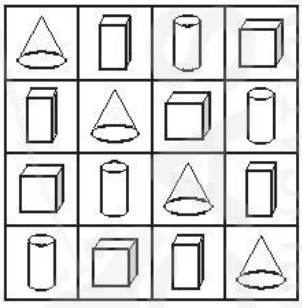


These 4 solids repeat to form the pattern.

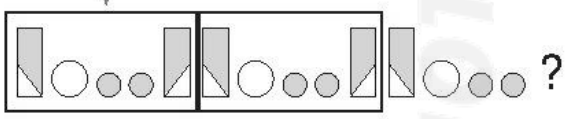
Challenge

Exercise 1

1.

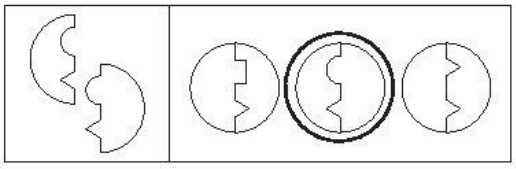


2. These 5 shapes repeat to form the pattern.

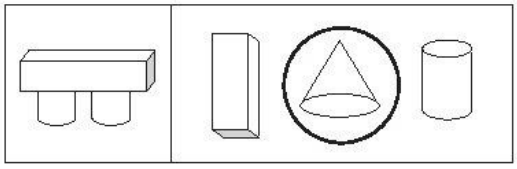


The next shape in the pattern is  .

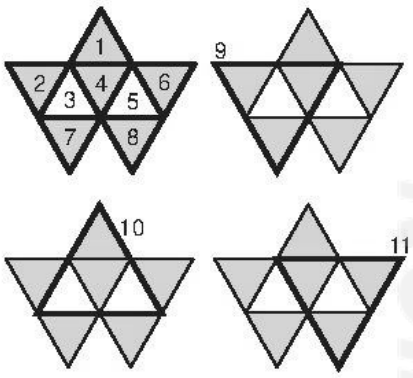
3.



4.

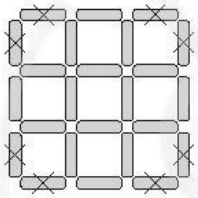


5.



These are **11** triangles in the figure.

6.



8 ice-cream sticks should be removed.

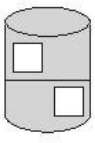
7.

Figure	1	2	3	4	5	6	7	8	9	10
No. of 	1	2	3	4	5	6	7	8	9	10

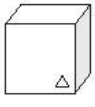
There are **10**  in the 10th figure.

8. **C** is the odd one out. A is the same as G, B is the same as E and D is the same as F.

9.



10.



Tip Common shapes/lines from the 2 bottom shapes are moved to the shape sitting above and between them.

Unit 11 Fractions

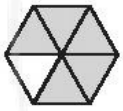
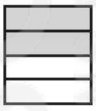
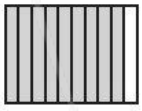
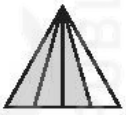
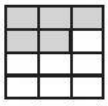
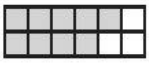
Drills

Exercise 1

1. $\frac{1}{6}$
2. $\frac{3}{4}$
3. $\frac{7}{12}$
4. $\frac{7}{10}$
5. $\frac{7}{8}$
6. $\frac{1}{4}$
7. $\frac{5}{8}$

Exercise 2

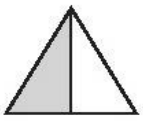
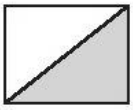
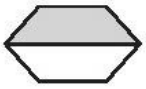
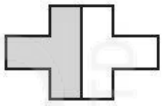
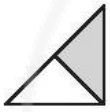
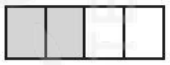
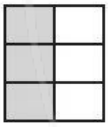
Answers may vary.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 

Perform

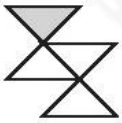
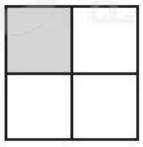
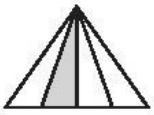
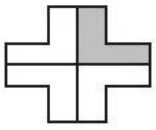
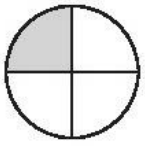
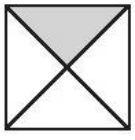
Exercise 1

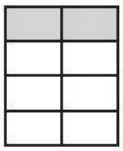
Answers may vary.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 

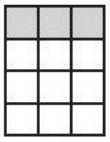
Exercise 2

Answers may vary.

1. 
2. 
3. 
4. 
5. 
6. 

7. 

8. 

9. 

Exercise 3

1. greater than
2. greater than
3. smaller than

Exercise 4

1. $\frac{7}{9}, \frac{5}{9}, \frac{4}{9}, \frac{1}{9}$
2. $\frac{6}{7}, \frac{5}{7}, \frac{4}{7}, \frac{3}{7}$

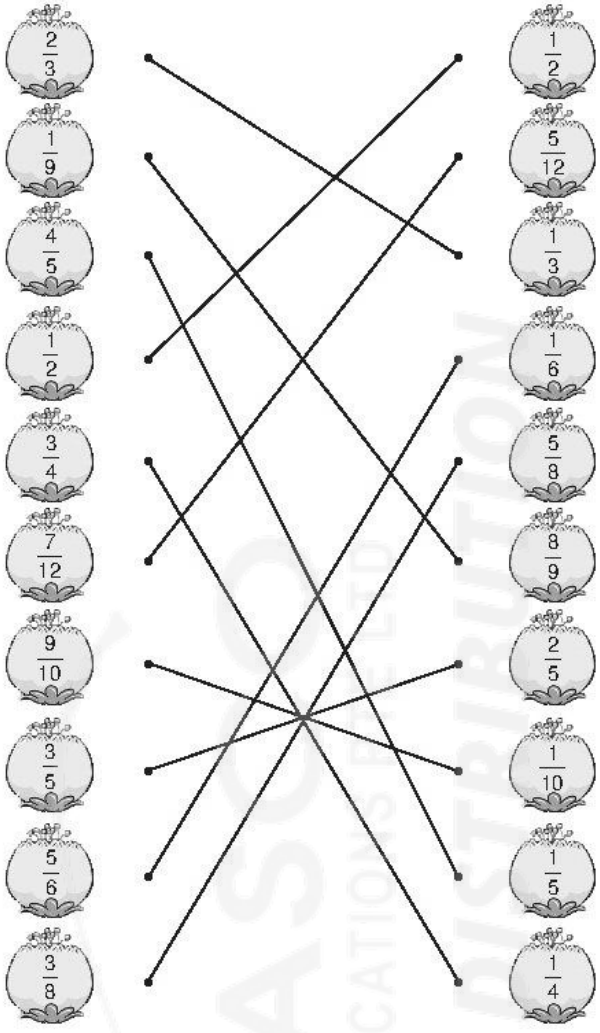
Exercise 5

1. $\frac{1}{12}, \frac{5}{12}, \frac{7}{12}, \frac{8}{12}$
2. $\frac{1}{5}, \frac{2}{5}, \frac{3}{5}, \frac{4}{5}$

Exercise 6

1. (3)
2. (2)
3. (3)
4. (3)
5. (1)
6. (3)
7. (4)

Exercise 7



Exercise 8

1. (a) 12 (b) 4
   (c) 9 (d) 7
   (e) 5 (f) 11
2. (a) $\frac{4}{5}$ (b) $\frac{5}{7}$
   (c) $\frac{6}{11}$ (d) $\frac{5}{6}$
   (e) $\frac{7}{10}$ (f) $\frac{1}{8}$

Exercise 9

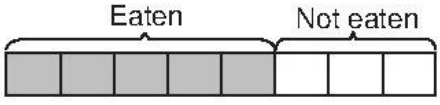
1. $\frac{3}{5}$
2. $\frac{2}{8}$
3. $\frac{5}{7}$
4. $\frac{8}{10}$
5. $\frac{11}{12}$
6. $\frac{8}{9}$
7. $\frac{4}{6}$
8. $\frac{1}{4}$
9. $\frac{3}{11}$
10. $\frac{6}{10}$
11. $\frac{2}{8}$
12. $\frac{7}{12}$
13. $\frac{6}{7}$
14. $\frac{4}{10}$

Achieve

Exercise 1

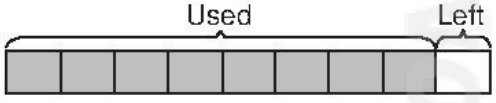
1. $\frac{3}{10} + \boxed{\frac{7}{10}} = 1$
2. $\frac{7}{8} - \boxed{\frac{4}{8}} = \frac{3}{8}$
3. $\boxed{\frac{6}{9}} + \frac{2}{9} = \frac{8}{9}$
4. $\boxed{\frac{11}{12}} - \frac{2}{12} = \frac{9}{12}$
5. $1 - \boxed{\frac{3}{5}} = \frac{2}{5}$
6. $\frac{3}{11} + \frac{5}{11} + \boxed{\frac{3}{11}} = 1$
7. $1 - \frac{2}{6} - \boxed{\frac{3}{6}} = \frac{1}{6}$

Exercise 2

1. 

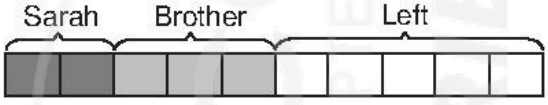
$\frac{8}{8} - \frac{5}{8} = \frac{3}{8}$

$\frac{3}{8}$ of the cake was not eaten.

2. 

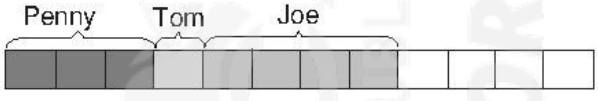
$\frac{9}{9} - \frac{8}{9} = \frac{1}{9}$

$\frac{1}{9}$ of the rope was left.

3. 

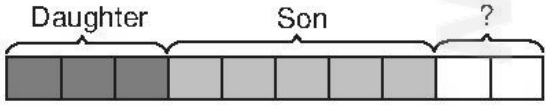
$\frac{10}{10} - \frac{2}{10} - \frac{3}{10} = \frac{5}{10}$

$\frac{5}{10}$ of the jelly was left.

4. 

$\frac{3}{12} + \frac{1}{12} + \frac{4}{12} = \frac{8}{12}$

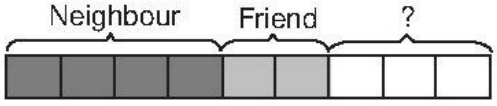
They ate $\frac{8}{12}$ of the pudding altogether.

5. 

$\frac{10}{10} - \frac{3}{10} - \frac{5}{10} = \frac{2}{10}$

$\frac{2}{10}$ of the pizza was left.

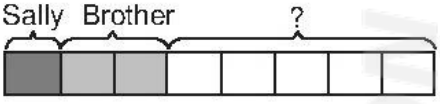
6.



$\frac{9}{9} - \frac{4}{9} - \frac{2}{9} = \frac{3}{9}$

She had $\frac{3}{9}$ of the cake left.

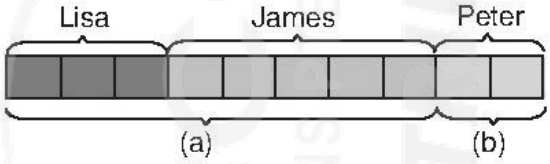
7.



$\frac{8}{8} - \frac{1}{8} - \frac{2}{8} = \frac{5}{8}$

$\frac{5}{8}$ of the pizza was left.

8. (a)



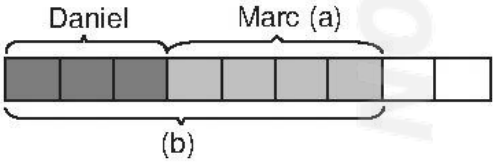
$\frac{3}{10} + \frac{5}{10} = \frac{8}{10}$

Lisa and James ate $\frac{8}{10}$ of the cake altogether.

(b) $\frac{10}{10} - \frac{8}{10} = \frac{2}{10}$

Peter ate $\frac{2}{10}$ of the cake.

9. (a)



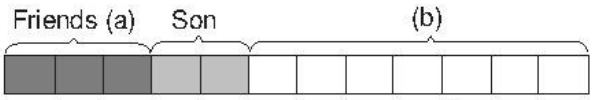
$\frac{3}{9} + \frac{1}{9} = \frac{4}{9}$

Marc ate $\frac{4}{9}$ of the pizza.

(b) $\frac{3}{9} + \frac{4}{9} = \frac{7}{9}$

Both boys ate $\frac{7}{9}$ of the pizza in all.

10. (a)



She gave away $\frac{3}{12}$ of the cake.

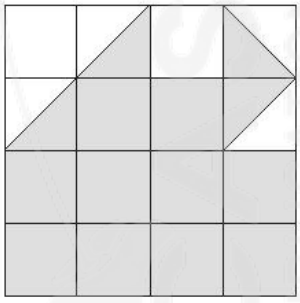
(b) $\frac{12}{12} - \frac{3}{12} - \frac{2}{12} = \frac{7}{12}$

Nancy had $\frac{7}{12}$ of the cake left in the end.

Challenge

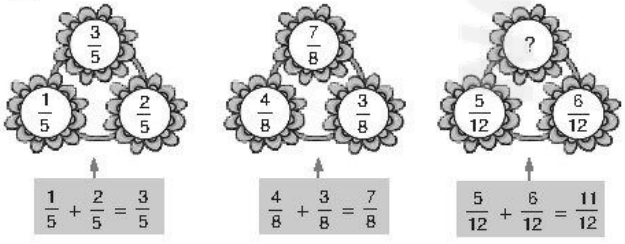
Exercise 1

1.



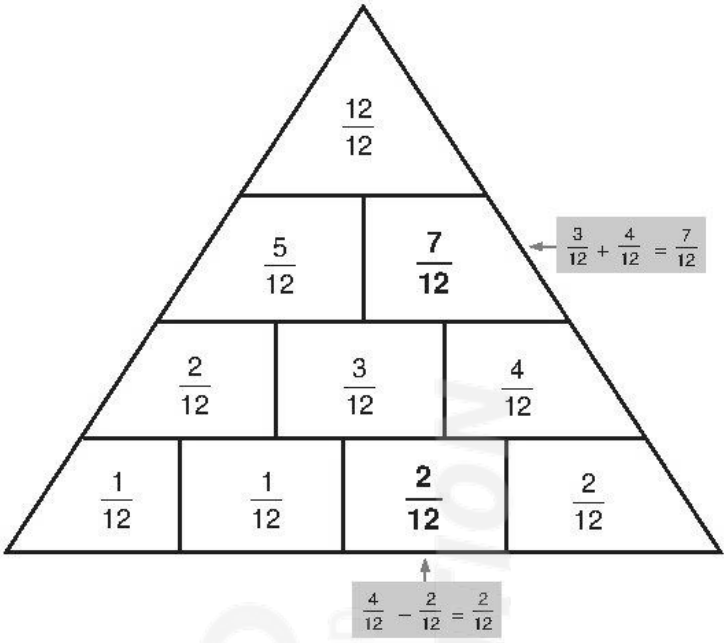
$\frac{3}{4}$ of the figure is shaded.

2.

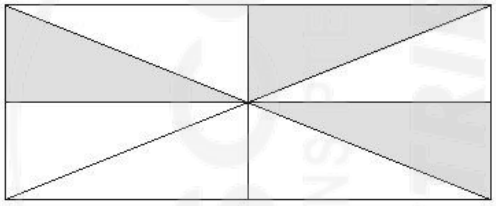


The missing fraction is $\frac{11}{12}$.

3.



4.



8 ÷ 2 = 4
4 parts must be shaded.
4 − 3 = 1
1 more part must be shaded.

Unit 12 Time

Drills

Exercise 1

1. 4.05
2. 9.35
3. 2.25
4. 7.55
5. 12.30
6. 7.30

Exercise 2

1. 6.35

( ) (✓) ( )

2. 4.10

(✓) ( ) ( )

3. 12.45

( ) ( ) (✓)

Exercise 3

9.10

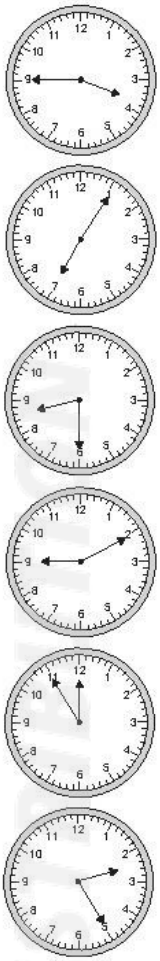
11.55

3.45

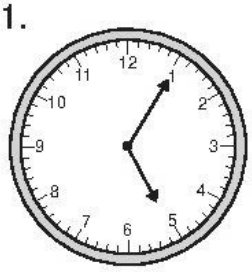
2.25

8.30

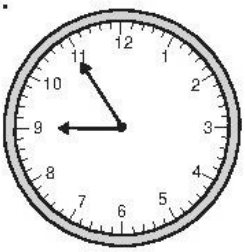
7.05



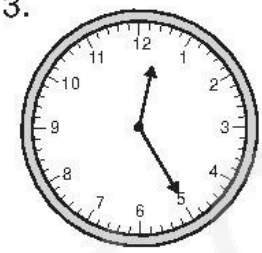
Exercise 4

1. 

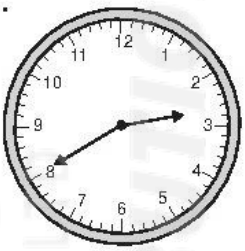
5.05

2. 

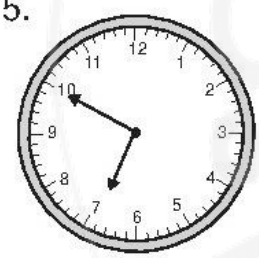
8.55

3. 

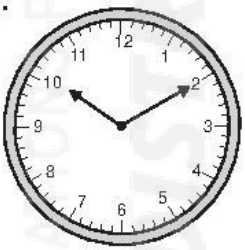
12.25

4. 

2.40

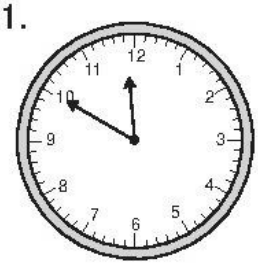
5. 

6.50

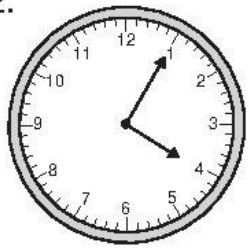
6. 

10.10

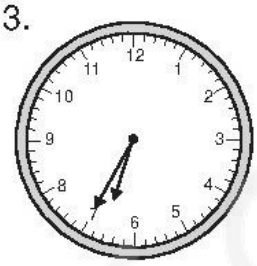
Exercise 5

1. 

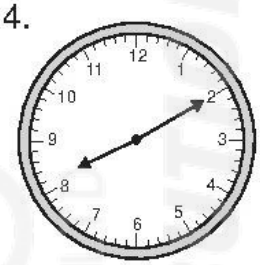
11.50

2. 

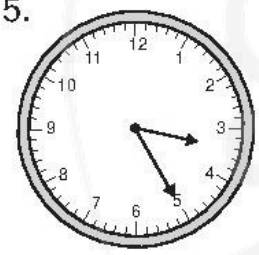
4.05

3. 

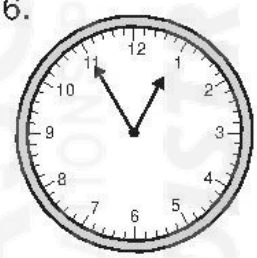
6.35

4. 

8.10

5. 

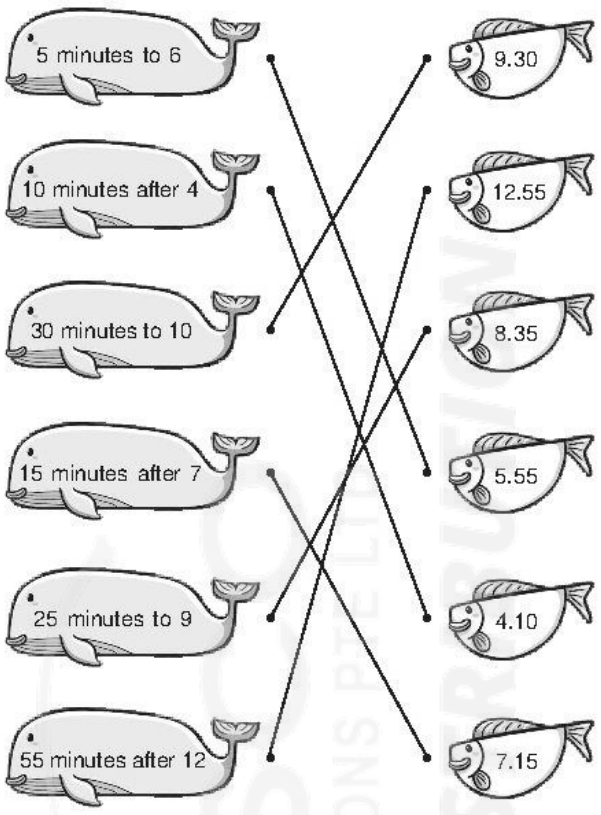
3.25

6. 

12.55

Perform

Exercise 1



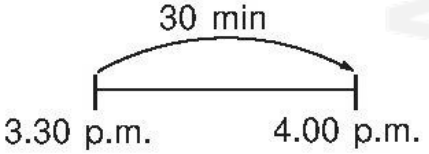
Exercise 2

1. p.m.
2. p.m.
3. a.m.
4. p.m.
5. a.m.
6. p.m.
7. a.m.

Achieve

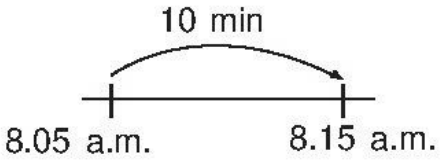
Exercise 1

1.



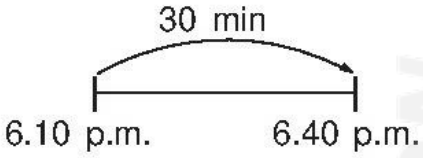
She reached the park at **4.00 p.m.**

2.



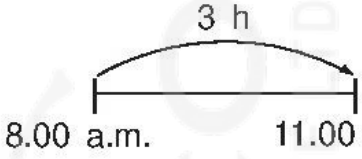
He will reach the market at **8.15 a.m.**

3.



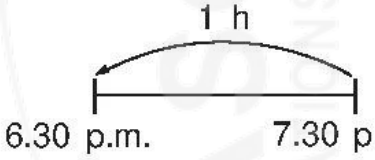
She finished her swim at **6.40 p.m.**

4.

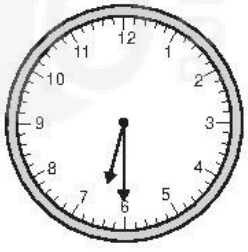


He reached Malacca at **11.00 a.m.**

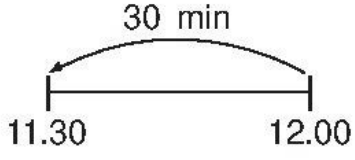
5.



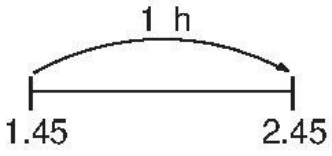
His piano lesson started at **6.30 p.m.**



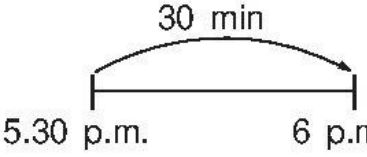
6.



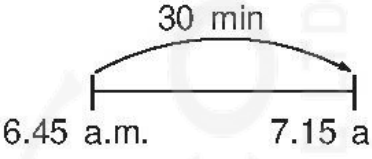
The actual time is **11.30.**

7. 

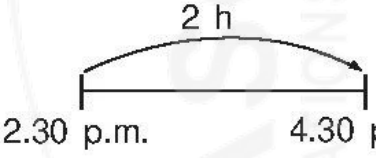
The actual time is **2.45.**

8. 

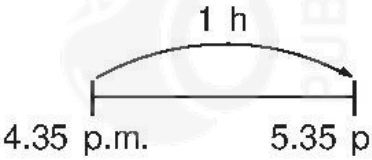
He spent **30 min** watching the programme.

9. 

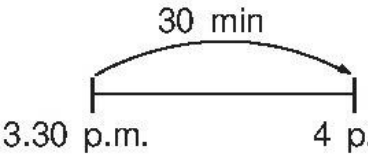
She takes **30 min** to get to school.

10. 

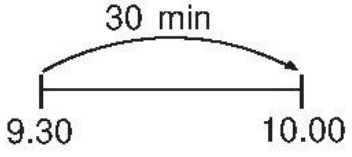
He was at Brian's place for **2 h**.

11. 

She was at the library for **1 h**.

12. 

Mary was **30 min** late.

13. 

Her yoga class was **30 min** long.

14. 20 min + 20 min + 20 min
= 60 min

He will take **60 min** to run 3 rounds.

Unit 13 Picture Graphs

Drills

Exercise 1

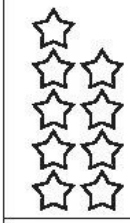
1. 4 × 3 = **12** horns
2. 6 × 2 = **12** rattles
3. 5 × 5 = **25** bears
4. 3 × 6 = **18** hats
5. 4 × 9 = **36** bicycles
6. 3 × 5 = **15** dolls
7. 2 × 10 = **20** kites
8. 2 × 7 = **14** soldiers
9. 5 × 3 = **15** spinning tops

Exercise 2

1.

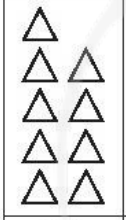
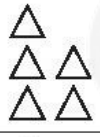
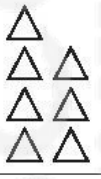
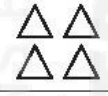
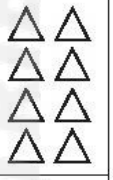
Our Favourite Food	
Chicken rice	☺☺☺☺☺☺☺
Wanton noodles	☺☺☺☺☺☺
Roti prata	☺☺☺☺
Fried carrot cake	☺☺
Satay	☺☺☺☺☺
Each ☺ stands for 5 people.	

2.

Number of Stickers Each Child Collected			
			
Bob	Thomas	Monica	Johnny
Each ☆ stands for 2 stickers.			

Exercise 3

1.

Number of Seashells Each Girl Collected				
				
Alicia	Megan	Mary	Janice	Alice
Each △ stands for 4 seashells.				

2.

Number of Dresses Sewed	
Thursday	⬠⬠⬠
Friday	⬠⬠⬠⬠
Saturday	⬠⬠
Sunday	⬠⬠⬠⬠⬠⬠
Each ⬠ stands for 3 dresses.	

Perform

Exercise 1

1. (a) $6 \times 3 = 18$
   Tim sold **18** balloons in March.
   (b) $10 \times 3 = 30$
   Tim sold **30** balloons in June.
   (c) Tim sold the most number of balloons in **June**.
   (d) Tim sold the least number of balloons in **March**.

2. (a) $5 \times 4 = 20$
   Julie made **20** cards on Tuesday.
   (b) Julie made the least number of cards on **Tuesday**.
   (c) Julie made the same number of cards on **Monday** and **Friday**.

3. (a) $\$90 - \$50 = \$40$
   Jacob saved **$40** less than Jack.
   (b) $\$80 - \$30 = \$50$
   Joe saved **$50** more than Joseph.
   (c) $\$90 + \$30 + \$80 + \$50 = \$250$
   The boys saved **$250** altogether.

Achieve

Exercise 1

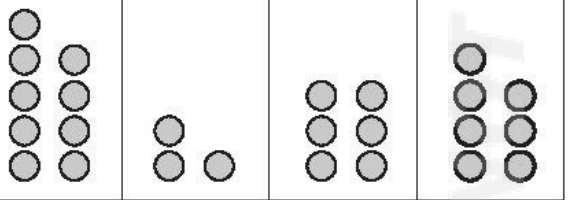
1. (a) $28 - 8 = 20$
   20 more children prefer red to green.
   (b) $32 - 20 = 12$
   12 fewer children prefer yellow to blue.
   (c) Most children prefer **blue**.

2. (a) $4 \times 5 = 20$
   Uncle Lim made **20** kites on Friday.
   (b) $10 \div 5 = 2$
   10 kites were made on **Sunday**.
   (c) Uncle Lim made the least number of kites on **Tuesday**.
   (d) $5 \times \$10 = \$50$
   He received **$50** from selling the kites on Tuesday.

3. (a) $24 - 6 = 18$
   18 more children prefer computer game to rattle.
   (b) The same number of children like **remote-control car** and **train set**.
   (c) Most children prefer **computer game**.

4. (a) $9 \times 5 = 45$
   James has **45** marbles.
   (b) $6 \times 5 = 30$
   Ben has 30 marbles.
   $30 \div 3 = 10$
   There are **10** marbles in each box.
   (c) $80 - 15 - 30 = 35$
   Marc has 35 marbles.
   $35 \div 5 = 7$
   Draw 7◯ in Marc's column.

Number of Marbles Each Boy Has



James	Tom	Ben	Marc

Each ◯ stands for 5 marbles.

Challenge

Exercise 1

1.

Number of Points Each Child Scored			
			
Wei Tian	Mei Ting	Sean	Krishnan
Each ◇ stands for 4 points.			

(a) Krishnan scored **12** points.
(b) Mei Ting scored **20** points.
(c) **Krishnan** scored the least number of points.
(d) 16 + 12 = 28
28 − 20 = 8
Sean's and Krishnan's total scores is **8** more points than Mei Ting's.

2.

Number of Fifty-Cent Coins Each Child Saved	
Marty	
Doreen	
Veera	
Violet	
Each ◯ stands for 3 fifty-cents coins.	

(a) Doreen saved **$3**.
(b) $6 − $4.50 = $1.50
Violet saved **$1.50** more than Veera.
(c) $6 − $1.50 = $4.50
Marty needed to save **$4.50** more in order to have as much as Violet.
(d) $3 − $2 = $1
She had **$1** left.

3.

Animals in Uncle Thomas' Farm				
				
Cow	Chicken	Duck	Horse	Sheep
Each ◯ stands for 2 animals.				

(a) 6 + 4 = 10
10 × 4 = 40
All the sheep and horses have **40** legs altogether.

(b) 10 − 8 = 2
2 × 2 = 4
All the ducks have **4** more legs than all the chickens.

(c) 6 − 2 = 4
4 × 4 = 16
All the cows have **16** fewer legs than all the sheep.

(d) 10 − 5 = 5
8 − 3 = 5
5 + 5 = 10
10 × 2 = 20
All the ducks and chickens that were left have **20** legs altogether.

4.

Our Favourite Colour			
☺☺☺	☺☺	☺	☺☺
Red	Blue	Yellow	Green
Each ☺ stands for 5 pupils.			

(a) The same number of pupils like **blue** and **green**.

(b) 15 + 10 + 5 + 10 = 40
There are **40** pupils in the class altogether.

(c) 15 − 5 = 10
10 more pupils prefer red to yellow.

(d) Most pupils prefer **red**.

5.

Number of Fruits Mr Leong Sold				
☆☆☆☆☆☆	☆☆☆☆☆☆	☆☆	☆☆☆☆	☆☆☆
Apple	Pear	Watermelon	Orange	Mango
Each ☆ stands for 4 fruits.				

(a) Mr Leong sold the most number of **pears**.

(b) 28 − 12 = 16
Mr Leong sold **16** more pears than mangoes.

(c) 24 ÷ 4 = 6
6 × $3 = $18
He collected **$18** from all the apples he sold yesterday.

(d) 24 + 16 = 40
40 − 12 = 28
He sold **28** apples and oranges yesterday.

Unit 14 Volume

Drills

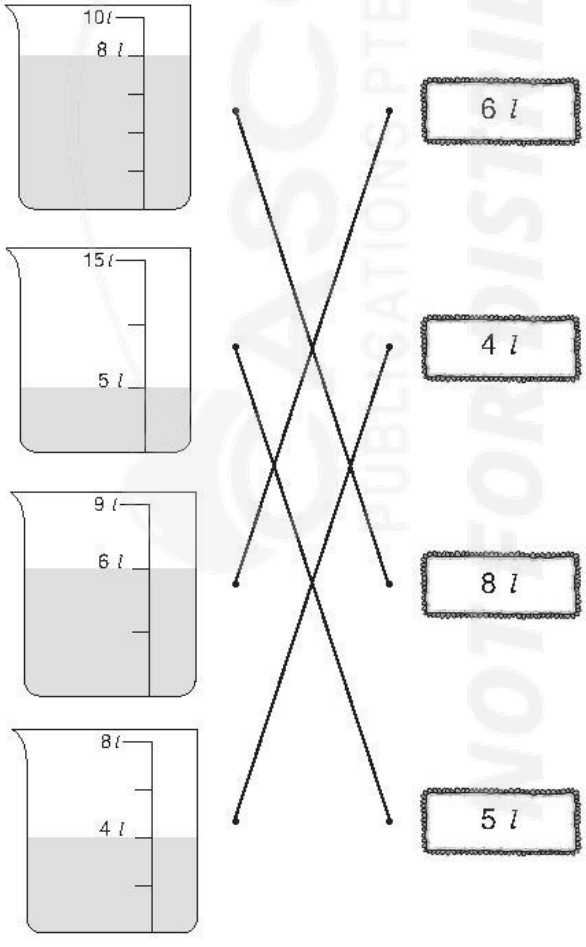
Exercise 1

1. 4 *l*
2. 16 *l*
3. 6 *l*
4. 10 *l*

Exercise 2

1. 3 *l*
2. 2 *l*
3. 8 *l*
4. 13 *l*
5. 6 *l*
6. 12 *l*

Exercise 3



Exercise 4

1. (a) less (b) more
   (c) B (d) A

2. (a) more (b) less
   (c) C (d) B

Perform

Exercise 1

1. The **kettle** can hold more water than the **bottle**.

2. $8\ l + 10\ l + 5\ l + 2\ l = 25\ l$
   $25\ l \div 5\ l = 5$
   I need **5** 5-litre bottles to fill up the four containers.

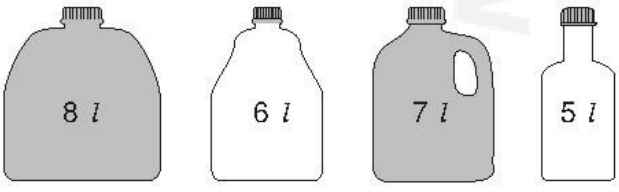
3. (a) $4 \times 1\ l = 4\ l$
   The bottle can hold **4** l of water.

   (b) $3 \times 2\ l = 6\ l$
   The kettle can hold **6** l of water.

   (c) $4\ l + 4\ l + 6\ l + 2\ l = 16\ l$
   The barrel can hold **16** l of water.

   (d) $16\ l - 6\ l = 10\ l$
   The kettle can hold **10** l less water than barrel.

4. $8\ l + 7\ l = 15\ l$

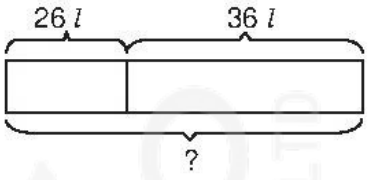


5. $5 \times 2\ l = 10\ l$
   1 tank can hold 10 l of water.

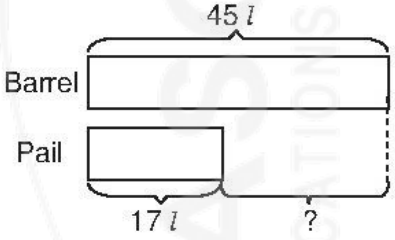
   $8 \times 10\ l = 80\ l$
   8 such tanks can hold **80** l of water altogether.

Achieve

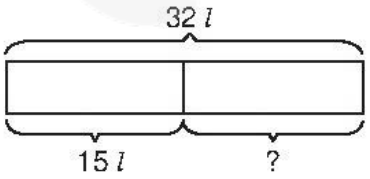
Exercise 1

1. 

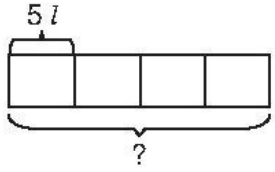
   $26\ l + 36\ l = 62\ l$
   She made **62** l of juice altogether.

2. 

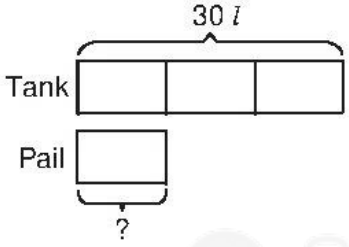
   $45\ l - 17\ l = 28\ l$
   The barrel can hold **28** l more water than the pail.

3. 

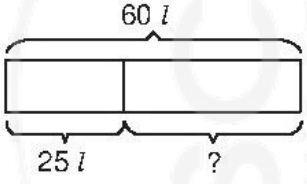
   $32\ l - 15\ l = 17\ l$
   17 l more water must be poured into the barrel to fill it completely.

4. 

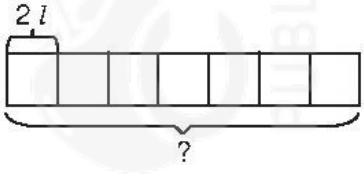
$4 \times 5\ l = 20\ l$
He uses **20 l** of paint to paint 4 similar rooms.

5. 

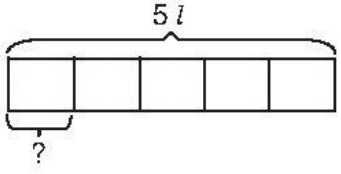
$30\ l \div 3 = 10\ l$
The pail can hold **10 l** of water.

6. 

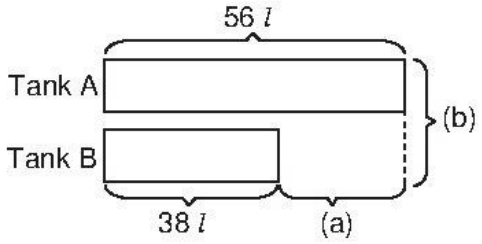
$60\ l - 25\ l = 35\ l$
He used **35 l** of water to wash his car.

7. 

$7 \times 2\ l = 14\ l$
She uses **14 l** of water to water her plants in a week.

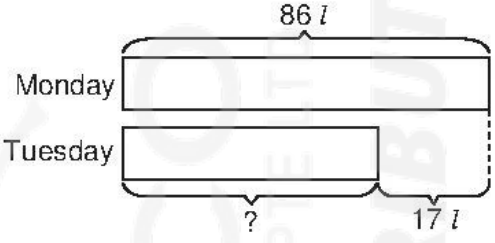
8. 

$5\ l \div 5 = 1\ l$
Each mug contains **1 l** of apple juice.

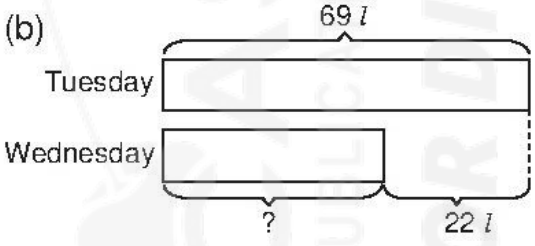
9. 

(a) $56\ l - 38\ l = 18\ l$
Tank A has **18 l** more water than Tank B.

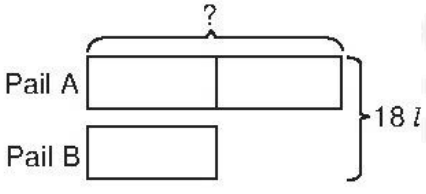
(b) $56\ l + 38\ l = 94\ l$
There are **94 l** of water in both tanks altogether.

10. (a) 

$86\ l - 17\ l = 69\ l$
She sold **69 l** of juice on Tuesday.

(b) 

$69\ l - 22\ l = 47\ l$
She sold **47 l** of juice on Wednesday.

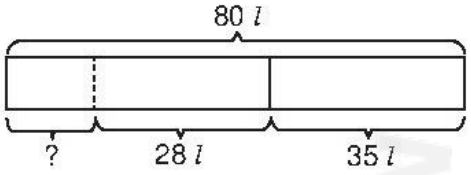
11. 

3 units = 18 l
1 unit = $18\ l \div 3$
= $6\ l$
2 units = $2 \times 6\ l$
= $12\ l$
Pail A can hold **12 l** of water.

12. 40 l − 25 l = 15 l
15 l + 32 l = 47 l

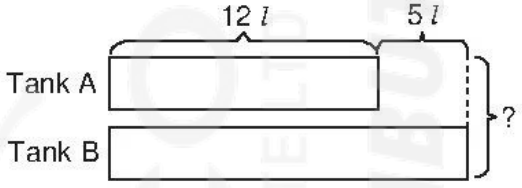
There are **47 l** of water in the barrel now.

13.



35 l + 28 l = 63 l
80 l − 63 l = 17 l
17 l lemonade was left.

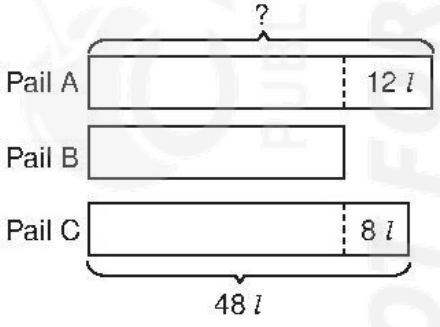
14.



12 l + 5 l = 17 l
Tank B can hold 17 l of water.

12 l + 17 l = 29 l
Both tanks can hold **29 l** of water altogether.

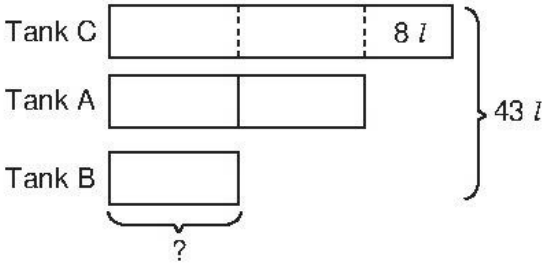
15.



48 l − 8 l = 40 l
Pail B has 40 l of water.

40 l + 12 l = 52 l
There are **52 l** of water in Pail A.

16.



5 units = 43 l − 8 l
= 35 l
1 unit = 35 l ÷ 5
= 7 l

Tank B contains **7 l** of water.

Challenge

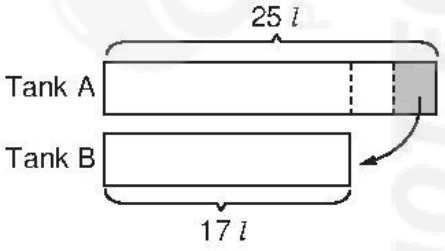
Exercise 1

1. Use guess and check.

Number of small pails	Volume of water in small pails	Number of big pails	Volume of water in big pails	Total volume of water	Check
6	6 × 3 l = 18 l	4	4 × 5 l = 20 l	18 l + 20 l = 38 l	✗
(7)	7 × 3 l = 21 l	3	3 × 5 l = 15 l	21 l + 15 l = 36 l	✓

He used **7** small pails of water.

2.



2 units = 25 l − 17 l
= 8 l
1 unit = 8 l ÷ 2
= 4 l

4 l of water must be poured from Tank A into Tank B.

Challenging Problems

Exercise 1

1. ○ + ⬡ = 670
   ○ + ○ = 440
   440 = 220 + 220

   ○ = 220
   ⬡ = 670 − 220 = **450**

2. Use guess and check.

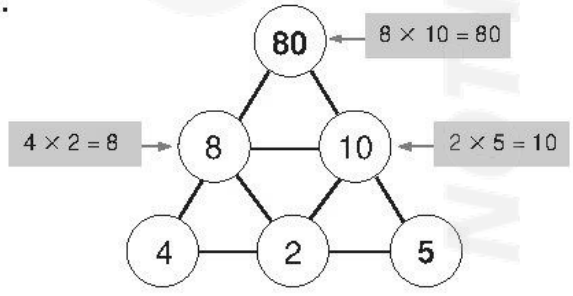
☆	⬠	☆ × ⬠	☆ + ⬠	Check
12	3	12 × 3 = 36	12 + 3 = 15	✗
9	4	9 × 4 = 36	9 + 4 = 13	✓

☆ − ⬠ = 9 − 4
= **5**

3.

3	4	5	10
15	20	**25**	50
3 × 5 = 15	4 × 5 = 20	5 × 5 = 25	10 × 5 = 50

4.



5.

6	**12**	20	30
2 3	3 4	4 **5**	**5** 6
2 × 3 = 6	3 × 4 = 12	4 × 5 = 20	5 × 6 = 30

6.

4	×	**8**	=	32
÷		÷		÷
2	×	**2**	=	**4**
=		=		=
2	×	4	=	**8**

7.

33	+	50	=	83
−		−		−
17	+	23	=	**40**
=		=		=
16	+	**27**	=	**43**

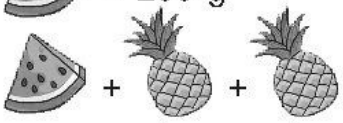
8.

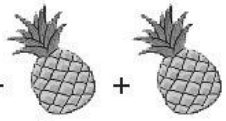
200 g	200 g	250 g	→ 650 g
200 g	300 g	300 g	→ 800 g
200 g	250 g	300 g	→ 750 g
↓	↓	↓	
600 g	750 g	(850 g)	

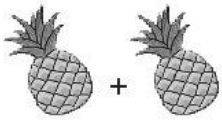
 = 600 g

200 g + 200 g + 200 g = 600 g

 = 200 g

 = 800 g

200 g +  = 800 g

 = 800 g − 200 g
= 600 g

300 g + 300 g = 600 g

 = 300 g

 = 650 g

200 g + 200 g +  = 650 g

 = 650 g − 400 g
= 250 g


= 250 g + 300 g + 300 g
= **850 g**

9.

$2	$5	$3	→ $10
$5	$2	$5	→ ($12)
$2	$3	$5	→ $10
↓ $9	↓ $10	↓ $13	

2  + 1  = $9

1  + 1  + 1  = $10

3  + 2  + 1 
= $9 + $10
= $19

2  + 1  = $13

3  = $19 − $13
= $6

1  = $6 ÷ $3
= $2

1  = $9 − $2 − $2
= $5

2  + 1 
= $5 + $5 + $2
= **$12**

10. 1 □ = 2 ⬭

2 □ = 2 × 2 ⬭ = 4 ⬭ = 6 ○

4 ⬭ = 6 ○

2 ⬭ = 6 ÷ 2 = 3 ○

∴ 6 ⬭ = 3 × 3 = **9** ○

11. 1 jug → 3 (2 *l*) = 6 (1 *l*)

1 (1 *l*) → 2 cups

6 (1 *l*) → 6 × 2 = **12** cups

It takes **12** cups to fill the jug.

12. 10 × $3 = $30
Mr Tan spent $30 on 10 files.

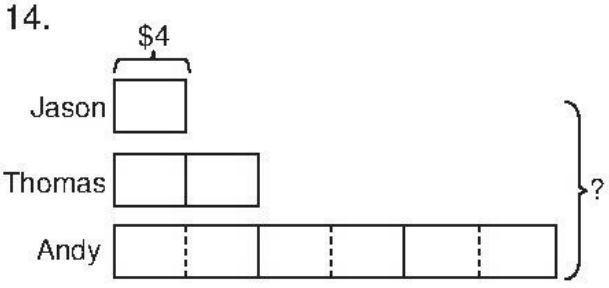
$3 − $1 = $2
$30 ÷ $2 = 15
Mr Tan could buy 15 files if each file was cheaper by $1.

15 − 10 = 5
5 more files could be bought with the same amount of money.

13. 1 week = 7 days
7 × 2 *l* = 14 *l*
The kittens drink 14 *l* of milk in a week.

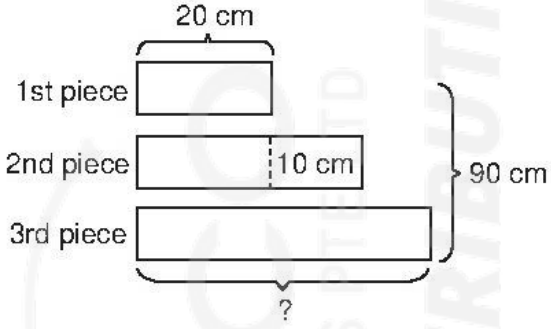
20 *l* − 14 *l* = 6 *l*
She will have **6 *l*** of milk left after a week.

14.



1 unit = $4
9 units = 9 × $4
= $36
The three boys saved **$36** altogether.

15.



20 cm + 10 cm = 30 cm
The 2nd piece is 30 cm long.

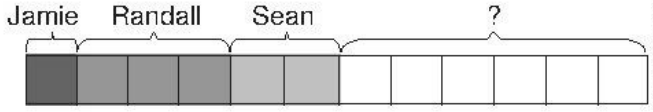
90 cm − 20 cm − 30 cm = 40 cm
The length of the third piece is **40 cm**.

16. 1 pen + 1 ruler + 1 notebook
×2 → $9
2 pens + 2 rulers + 2 notebooks
→ 2 × $9 = $18
5 pens + 3 rulers + 2 notebooks
→ $28

×2 3 pens + 1 ruler → $28 − $18 = $10
6 pens + 2 rulers → 2 × $10 = $20

The total cost of 6 pens and 2 rulers is **$20**.

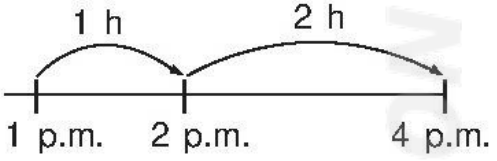
17.



$1 - \frac{1}{12} - \frac{3}{12} - \frac{2}{12} = \frac{6}{12}$

Mrs Loh had $\frac{6}{12}$ of the cake left.

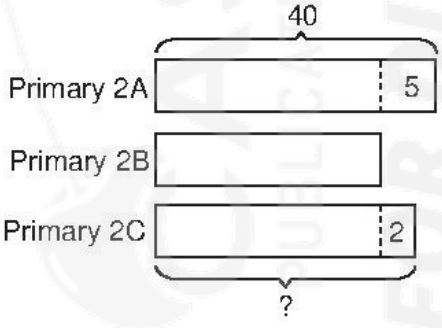
18.



She finished her tuition at **4 p.m.**

19. 5 − 2 = 3
2 × 10 = 20
3 × 5 = 15
20 + 15 + 6 = 41
He has **41** marbles at first.

20. 26 + 14 = 40
There are 40 pupils in Primary 2A.



40 − 5 = 35
There are 35 pupils in Primary 2B.

35 + 2 = 37
There are **37** pupils in Primary 2C.

Review Assessment 1

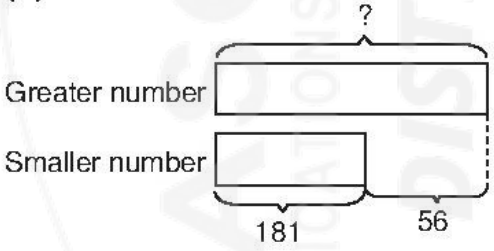
Section A

1. **(1)**
Four hundred and eleven = 411

2. **(3)**
70 tens 32 ones
= 700 + 32
= 732
The digit 3 is in the tens place.

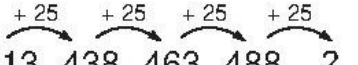
3. **(2)**
547 + 53 = 600
= 60 tens
There are 60 tens in the sum of 547 and 53.

4. **(4)**



181 + 56 = 237
The greater number is 237.

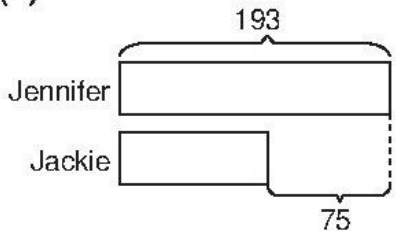
5. **(4)**



413, 438, 463, 488, ?

488 + 25 = 513
The missing number in the number pattern is 513.

6. **(1)**



193 − 75 = 118
Jackie collected <u>118</u> seashells.

7. **(4)**
5 + 5 + 5 + 5 + 5 + 5 + 5 + 5
= 8 × 5
= <u>4</u> × 10

8. **(2)**
5 sixes = <u>5 groups of 6</u>

9. **(1)**
$4 \times \underline{6} = \overbrace{12 + 12}^{24}$

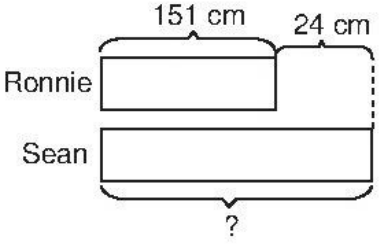
10. **(3)**
20 ÷ 4 = 5
Each boy will receive <u>5</u> marbles.

11. **(4)**
1 whole = $\frac{3}{3}$

7 wholes = $\frac{21}{3}$

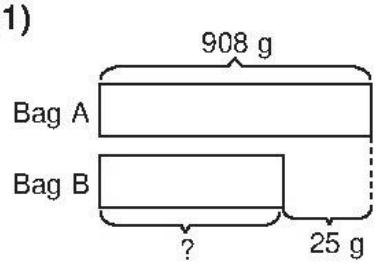
There are <u>21</u> thirds in 7 wholes.

12. **(3)**



151 cm + 24 cm = 175 cm
Sean is <u>175 cm</u> tall.

13. **(1)**

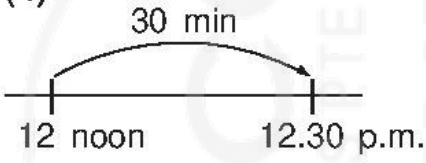


908 g − 25 g = 883 g
The mass of Bag B is <u>883 g</u>.

14. **(4)**
The figure is made up <u>4</u> types of shapes.

15. **(3)**
Marc has <u>$79.50</u>.

16. **(4)**



30 minutes after 12 noon is <u>12.30 p.m.</u>

17. **(4)**
There are <u>6</u> flat faces in the solid.

18. **(3)**
7 × 4 *l* = 28 *l*
She drinks <u>28 *l*</u> of water in a week.

19. **(2)**
18 − 9 = 9
There were <u>9</u> more children at the playground on Friday than on Monday.

20. **(4)**
15 + 12 + 15 = 42
<u>42</u> children were at the playground from Tuesday to Thursday.

Section B

21. 16 tens 9 ones
= 160 + 9
= 169

170 = 17 tens

16 tens 9 ones comes just before **17** tens.

22. 36 tens 87 ones
= 360 + 87
= **447**

23. 629 + 15 tens
= 629 + 150
= 779
= **Seven hundred and seventy-nine**

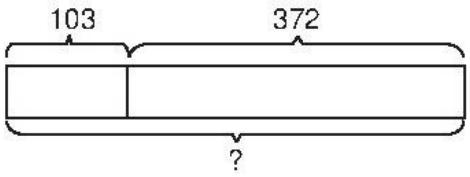
24. 1000 − 203 = 797
797 − 546 = 251
546 + **251** = 1000 − 203

25. (a) Greatest 3-digit even number
= **520**
(b) Smallest 3-digit number smaller than 400
= **205**

26. 54 tens − 4 hundreds
= 540 − 400
= 140

140 + 16 tens
= 140 + 160
= 300

The answer is **300**.

27. 

103 + 372 = 475
He baked **475** muffins.

28. 9 groups of 4
= 9 × 4
= 36
= 30 + **6**

29. **15** ÷ **3** = **5**

OR

15 ÷ **5** = **3**

30. 14 cm − 5 cm = 9 cm

The toothbrush is **9 cm** longer than the toothpaste.

31. 24 ÷ 4 = 6

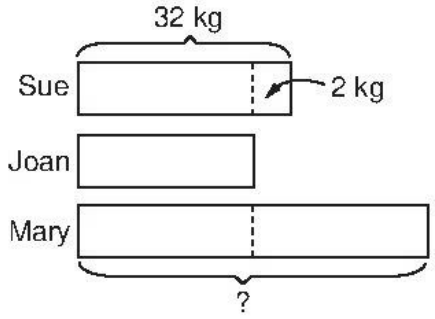
Each of them would receive **6** cups of ice-cream.

32. 45¢ + 45¢ = 90¢
$1 − $0.90 = $0.10

She received **$0.10** in change.

33. $\frac{3}{8}$ of the figure is shaded.

34.

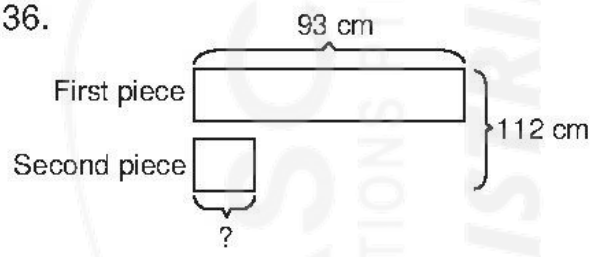


32 kg − 2 kg = 30 kg
Joan's mass is 30 kg.

30 kg + 30 kg = 60 kg
Mary's mass is **60 kg**.

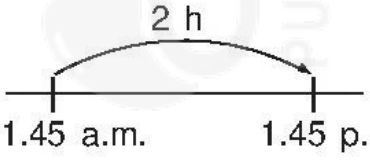
35. 5 × 4 = 20
20 cups of water are required to fill the same pail.

36.



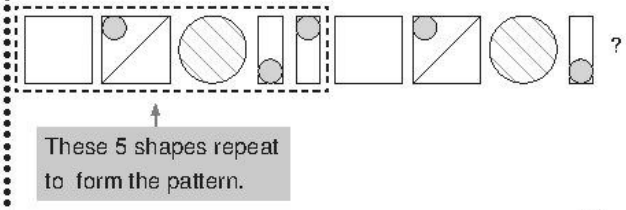
112 cm − 93 cm = 19 cm
The length of the other piece of ribbon is **19** cm.

37.



He was away from home for **2** hours.

38.



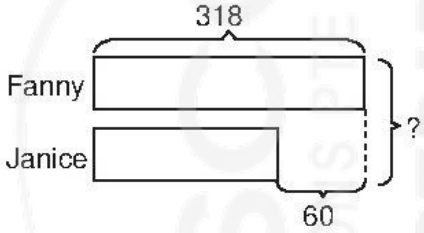
The next shape in the pattern is  .

39. Tom sold the most number of balloons in the month of **April**.

40. Tom sold the same number of balloons in **January** and **March**.

Section C

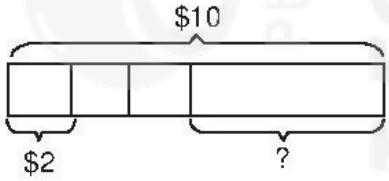
41.



318 − 60 = 258
Janice sewed 258 dresses.

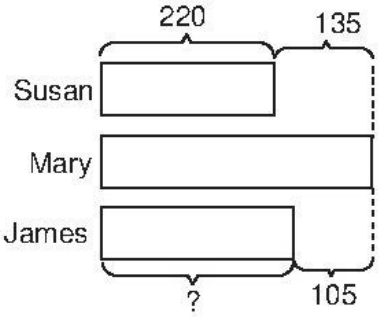
318 + 258 = 576
They sewed **576** dresses altogether.

42.



3 × $2 = $6
$10 − $6 = $4
She received **$4** in change.

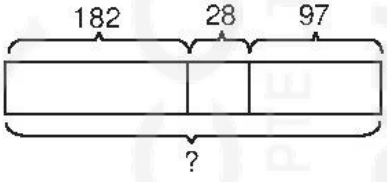
43.



220 + 135 = 355
Mary collected 355 postcards.

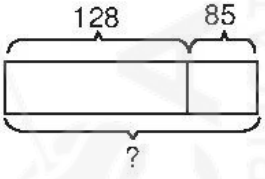
355 − 105 = 250
James collected **250** postcards.

44.



182 + 28 + 97 = 307
There are **307** books altogether.

45.



128 + 85 = 213
He had **213** game cards at first.

Review Assessment 2

Section A

1. **(1)**
Three hundred and forty-five
= 300 + 40 + 5

2. **(3)**
31 tens 18 ones
= 310 + 18
= 328

The digit 3 is in the hundreds place.

3. **(3)**
2 hundreds + 31 tens
= 200 + 310
= 510

510 − 25 tens
= 510 − 250
= 260

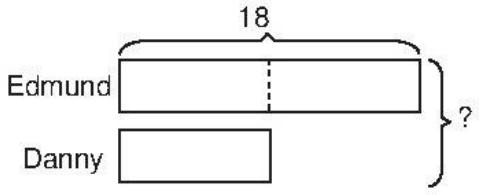
4. **(2)**
30 + 30 + 20 = 80
100 − 80 = 20

30 + 30 + 20 + 20 = 10 tens

5. **(4)**
+4 +4 +4 +4 +4
524, 528, 532, 536, 540, 544

The missing numbers are 532 and 544.

6. **(3)**



2 units = 18 stickers
1 unit = 18 ÷ 2
= 9 stickers
3 units = 3 × 9
= 27 stickers

They collected 27 stickers in all.

7. **(2)**
$3 \times 6 = 18$
$= 9 \times 2$

9 groups of 2 is the same as 3×6.

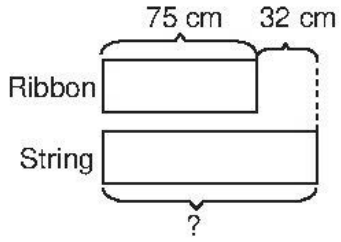
8. **(4)**
$5 \times 2 = 10$
$10 \times 5 = 50$
$50 \div 5 = 5 \times 2$

9. **(4)**
$10 + 10 + 10 = 30$
$30 = 15 + 15$
$10 + 10 + 10 = 15 \times 2$

10. **(1)**
$28 \div 4 = 7$
There are 7 cookies in each container.

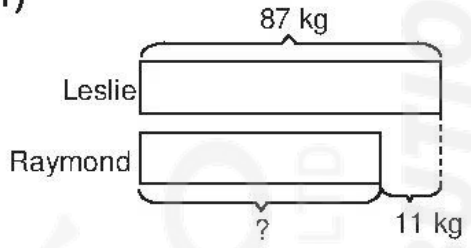
11. **(2)**
The fraction arranged starting from the greatest are: $\frac{1}{5}, \frac{1}{8}, \frac{1}{11}$

12. **(2)**



75 cm + 32 cm = 107 cm
The length of the string is 107 cm.

13. **(1)**

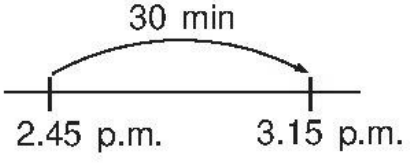


87 kg − 11 kg = 76 kg
Raymond's mass is 76 kg.

14. **(2)**
$7 - 4 = 3$
There are 3 more triangles than semicircles in the picture.

15. **(3)**
Option (1): Amy has $1.70.
Option (2): Bob has $1.80.
Option (3): Charlie has $1.60. (✓)
Option (4): Daniel has $1.75.

16. **(4)**



He spent 30 min watching cartoon.

17. **(2)**
There are 2 flat faces in the solid.

18. (1)
35 l ÷ 5 = 7 l
He used 7 l of petrol in a day.

19. (1)
Most children attend drama classes.

20. (1)
21 − 12 = 9
9 more children attend classes in Phonics than in Dancing.

Section B

21. 45 tens 12 ones
= 450 + 12
= 462
461 comes between **46** tens and 45 tens 12 ones.

Tip 46 tens = 460

22. 37 tens = 370
37 tens is greater than **369**.

23. 548 + 52
= 600
= **Six hundred**

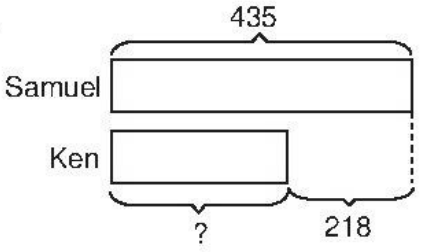
24. 960 − 394 = 566
566 − 546 = 20
= 2 tens
546 + **2** tens = 960 − 394

25. 5 hundreds + 23 ones
= 500 + 23
= 523

523 − 14 tens
= 523 − 140
= 383

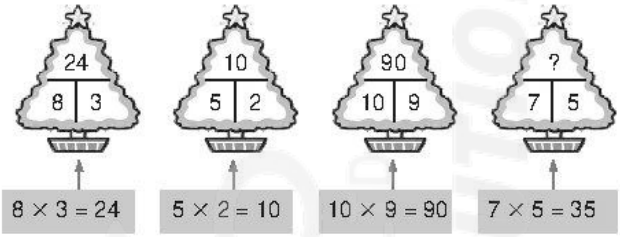
The answer is **383**.

26.



435 − 218 = 217
Ken collected **217** stamps.

27.



The missing number is **35**.

28. 7 + 7 + 7 + 7 = **2** groups of 14
14 14

29. 15 ÷ 5 = 3
Each of them got **3** sweets.

30. 4 × 8 = 32
Jeffrey had **32** pens.

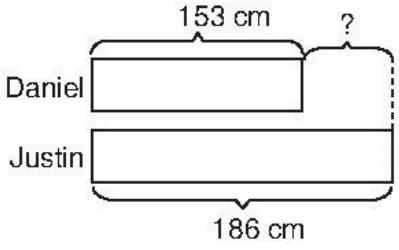
31. 5 × 20¢ = $1
15 × 10¢ = $1.50
$1 + $1.50 = $2.50
She had **$2.50**.

32. $\frac{7}{12}$ of the figure is not shaded.

33. 250 g + 140 g + 140 g = 530 g
The total mass of 1 such slice of watermelon and 2 such apples is **530 g**.

34. $3 \times 6 = 18$
3 similar buckets will require **18** such bottles.

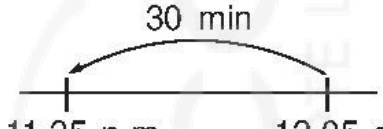
35.



186 cm − 153 cm = 33 cm
Justin is **33 cm** taller than Daniel.

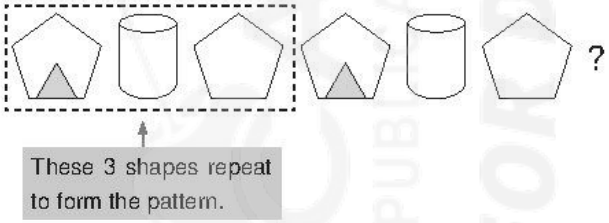
36. By measurement, line AB is **10 cm** long.

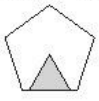
37.



30 minutes to 12.05 a.m. is **11.35 p.m.**

38.



The next shape in the pattern is  .

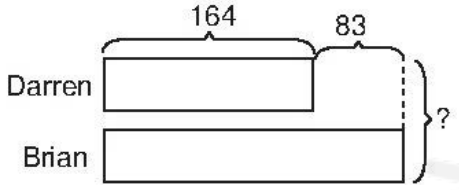
39. $35 − $20 = $15
Chris saved **$15** more than Jimmy.

40. $45 − $35 = $10
Tony saved **$10** less than Daniel.

Section C

41. $8 + $8 + $5 = $21
2 adults a child have to pay **$21**.

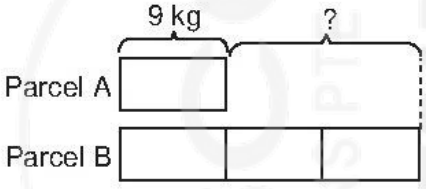
42.



164 + 83 = 247
Brian collected 247 stickers.

164 + 247 = 411
Both of them collected **411** stickers altogether.

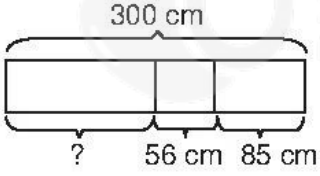
43.



1 unit = 9 kg
2 units = 2 × 9 kg
= 18 kg

Parcel B is **18 kg** heavier than Parcel A.

44.



56 cm + 85 cm = 141 cm
300 cm − 141 cm = 159 cm
159 cm of the string is left.

45. (a) $3 \times 6 = 18$
Lisa bought **18** erasers altogether.
(b) $18 \div 2 = 9$
She has **9** bags of erasers.

Review Assessment 3

Section A

1. **(1)**
   Eight hundred and sixty-nine
   = 869
   = 800 + 60 + 9

2. **(2)**
   Greatest number → 546
   Smallest number → 274
   546 + 274 = 820
   The answer is 820.

3. **(2)**
   Option (1): 463 + 283 = 746
   Option (2): 884 − 96 = 788 (✓)
   Option (3): 593 + 102 = 695
   Option (4): 1000 − 253 = 747

4. **(4)**
   $\underbrace{5 \times 2}_{10} = \underbrace{0 \times 10}_{0}$

5. **(2)**
   The tin of baked beans has 2 flat faces.

6. **(2)**
   I am the number 638.

7. **(3)**
   9 cm − 6 cm = 3 cm
   The marker pen is 3 cm shorter than the ribbon.

8. **(3)**
   Mike's grandfather begins his daily exercise at 6.45 a.m.

9. **(4)**
   $\underbrace{3 \times 10}_{30} = \underbrace{8 \times 4}_{32}$

10. **(4)**
    $\frac{5}{8}$ of the figure is shaded.

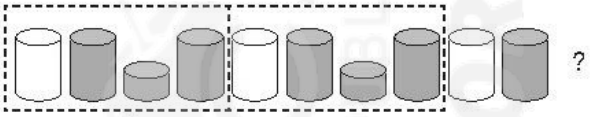
11. **(4)**
    2 + 2 + 2 ← The picture shows 3 groups of 2, i.e. 2 + 2 + 2.

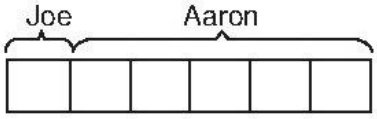
12. **(3)**
     is not divided into equal parts.

13. **(4)**
    There are 16 *l* of water in the beakers.

14. **(4)**
    12 ÷ 3 = 4
    Each child will receive 4 toy soldiers.

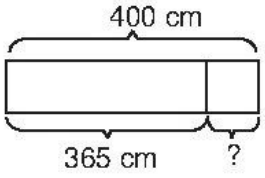
15. **(1)**
    584 − 76 = 508
    = 500 + 8

16. **(1)**
    
    These 4 solids repeat to form the pattern.
     comes next in the pattern.

17. **(4)**
    

    $1 - \frac{1}{6} = \frac{5}{6}$
    Aaron ate $\frac{5}{6}$ of the pizza.

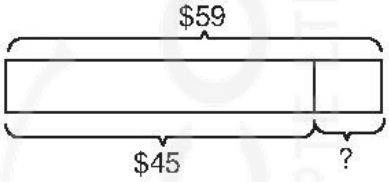
18. **(1)**



400 cm – 365 cm = 35 cm
The length of the other piece is 35 cm.

19. **(2)**
540 g – 400 g = 140 g
The mass of the carrots is 140 g.

20. **(1)**



$59 – $45 = $14
He needs $14 more.

Section B

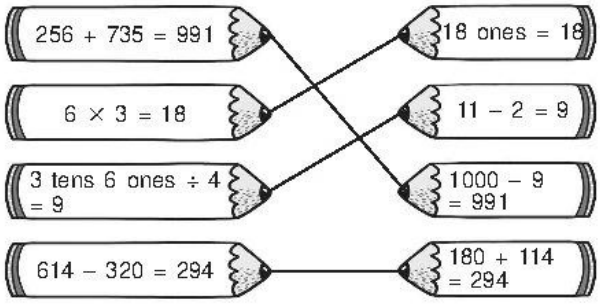
21. 76 + 36 tens 9 ones
= 76 + 360 + 9
= 445

The digit **5** in the answer is in the ones place.

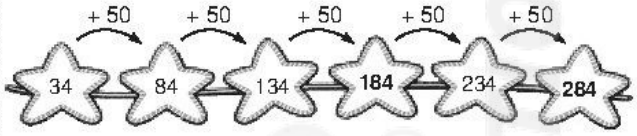
22. 700 + 50 + 2 = 752

752 + 68
= 820
= **Eight hundred and twenty**

23.

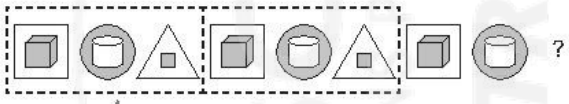


24.



134 + 50 = 184
234 + 50 = 284

25.



These 3 shapes repeat to form the pattern.

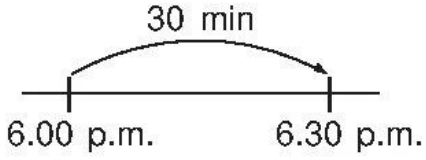
 comes next in the pattern.

26. **5 × 4 = 20**
20 ÷ 5 = 4 or **20 ÷ 4 = 5**

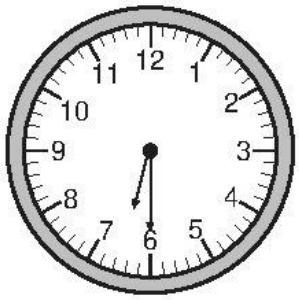
27. (a) 1000 g – 485 g **is greater than** 510 g

(b) 329 g **is smaller than**
300 g + 90 g + 2 g

28.



James reached home at 6.30 p.m.



29. 9 cm + 6 cm = 15 cm
The total length of the toy hammer and the ribbon is **15 cm**.

30. $\frac{7}{10}$ of the figure is not shaded.

31. There are **7** straight lines and **3** curves.

32. $24 + $18 + $6 = $48
Dress, Skirt, Hat

She bought a **dress**, a **skirt** and a **hat**.

33.

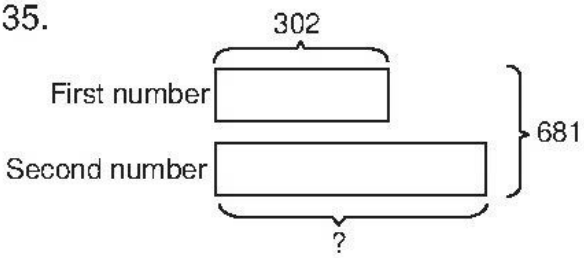
Day	1st	2nd	3rd	4th	5th
Number of seashells	3	6	12	24	48

3 + 3 = 6; 6 + 6 = 12; 12 + 12 = 24; 24 + 24 = 48

She will pick **48** seashells on the 5th day.

34. 3 + 6 + 12 + 24 + 48 = 93
She picked **93** seashells for the 5 days altogether.

35.



681 − 302 = 379
The other number is **379**.

36. 3 × 2 *l* = 6 *l*
Jack bought **6 litres** of soya bean milk altogether.

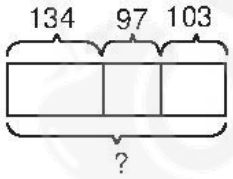
37. 24 ÷ 3 = 8
Each of them will receive **8** lollipops.

38. $30 ÷ 10 = $3
She spent **$3** on each pen.

39. 20 × 50¢ = $10
4 × $1 = $4
$10 + $4 = $14
$14 ÷ $2 = 7

He got **7** two-dollar notes.

40.

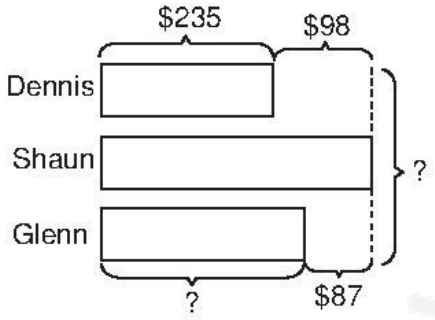


134 + 97 = 231
231 + 103 = 334

He had **334** balloons at first.

Section C

41.



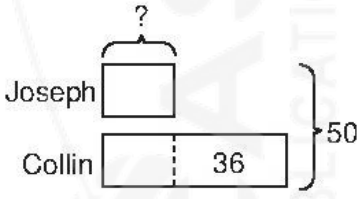
$235 + $98 = $333
Shaun saved $333.

$333 − $87 = $246
Glenn saved $246.

$235 + $333 + $246 = $814
They saved **$814** altogether.

42. 691 − 325 = 366
546 − 366 = 180
He sold **180** pots.

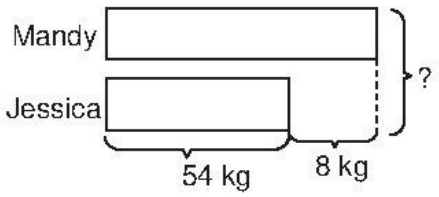
43.



2 units = 50 − 36
= 14 stamps
1 unit = 14 ÷ 2
= 7 stamps

Joseph collected **7** stamps.

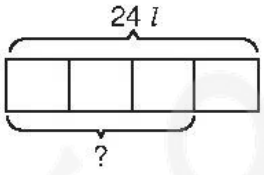
44.



54 kg + 8 kg = 62 kg
Mandy's mass is 62 kg.

54 kg + 62 kg = 116 kg
The total mass of Mandy and Jessica is **116 kg**.

45.



4 units = 24 *l*
1 unit = 24 *l* ÷ 4
= 6 *l*
3 units = 3 × 6 *l*
= 18 *l*

There were **18 *l*** of water in 3 such pails.