P3 Solutions

Note: In all solution, u represents units and p represents parts.

Chapter 1  Whole Numbers

Answers to Unit 1.1 – More than

Let's Get Started 1.1

2.

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>1u</td>
<td>300</td>
</tr>
<tr>
<td>B</td>
<td>1u</td>
<td></td>
</tr>
</tbody>
</table>

3.

<p>| | | |</p>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>1u</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>1u</td>
<td>890</td>
</tr>
</tbody>
</table>

Ask Yourself

1. Samantha has more money than Rhona. Hence, when drawing the model, the bar representing Samantha has to be longer than the bar representing Rhona. Check the models are labelled correctly, making parts equal.

Think Further

1. Yes, it would be the same.

Let's Practise 1.1

Question 1

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>2348</td>
<td>450</td>
</tr>
<tr>
<td>L</td>
<td>2348</td>
<td></td>
</tr>
</tbody>
</table>

James' stickers = 2348 + 450 = 2798

James has 2798 stickers.

Question 2

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>?</td>
<td>386</td>
</tr>
<tr>
<td>A</td>
<td>?</td>
<td></td>
</tr>
</tbody>
</table>

April = 1425 – 386
= 1039

Mr Lim sold 1039 files in April.

Question 3

<table>
<thead>
<tr>
<th>R1</th>
<th>2345</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R2</td>
<td>2345</td>
<td>977</td>
</tr>
</tbody>
</table>

Total = 2345 + 2345 + 977
= 5667

Ali’s total score was 5667 points.

Question 4

<table>
<thead>
<tr>
<th>CF</th>
<th>2448</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>2448</td>
<td>863</td>
</tr>
</tbody>
</table>

Total = 2448 + 2448 + 863
= 5759

Angie baked 5759 cookies in total.

Answers to Unit 1.2 – Less Than/Fewer Than

Let's Get Started 1.2

2.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>1u</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>1u</td>
<td>87</td>
</tr>
</tbody>
</table>

3.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1u</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>1u</td>
<td>240</td>
</tr>
</tbody>
</table>

4.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>1u</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>1u</td>
<td>78</td>
</tr>
</tbody>
</table>

Ask Yourself

1. Beth has more seashells than Sandy. Sandy has fewer seashells than Beth.

Think Further

1. Difference = 108 – 20
= 88

Total seashells = 98 + 10
= 108

The two girls have a total of 108 seashells.

For more review questions, please visit www.onsponge.com
Let's Practise 1.2

Question 1

Derrick's stickers = 611 + 133
= 744
Derrick has **744 stickers**.

Question 2

Total = 3452 + 3452 + 1093
= 7997
Both machines produce **7997 toys** in a day.

Question 3

Red = 5826 – 2575 = 3251
There were **3251 red apples**.

Question 4

(a) Chinese books = 8641 – 5711
= 2930
There were **2930 Chinese books** in the library.
(b) Difference → 5711 – 2930 = 2781
There were **2781 fewer** Chinese than English books in the library.

Answers to Unit 1.3 – Equal Stage (Beginning)

Let's Get Started 1.3

2.

At first

A
B

End

A
B

Think Further

1.

After

P
C

As more students left the canteen than the playground, there are 5 more students in the playground in the end.

Let's Practise 1.3

Question 1

At first

S
T

End

S
T

Difference = 288 + 56
= 344

**344 more** twin beds than single beds remained in Mr Johan’s shop in the end.
Let’s Get Started 1.4

1u = 60 – 12
= 48
Maggie had **48 picture cards** in the end.

**Question 3**

At first

<table>
<thead>
<tr>
<th>J</th>
<th>1u</th>
<th>12</th>
<th>28</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>1u</td>
<td>12</td>
<td>28</td>
</tr>
</tbody>
</table>

1u = 60 – 12
= 48

Maggie had **48 picture cards** in the end.

**Think Further**

At first

<table>
<thead>
<tr>
<th>P</th>
<th>15</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

3.

<table>
<thead>
<tr>
<th>A</th>
<th>1u</th>
<th>15</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1u</td>
<td>15</td>
<td>5</td>
</tr>
</tbody>
</table>

There were **1179 men** in the museum in the end.

---

Let’s Practise 1.4

**Question 1**

At first

<table>
<thead>
<tr>
<th>T</th>
<th>24</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

Coach Tim would only have **8 more** bean bags than tennis balls at first.

**Question 2**

At first

<table>
<thead>
<tr>
<th>J</th>
<th>M</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
</tr>
<tr>
<td>M</td>
</tr>
</tbody>
</table>

1u = 60 – 12
= 48

Maggie had **48 picture cards** in the end.

(a) 345 – 163 = 182
There were **182 more** shirts sold than trousers.

(b) 500 – 182 = 318
There were **318 shirts** left after the sale.

---

**Question 4**

At first

<table>
<thead>
<tr>
<th>T</th>
<th>500</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
</tr>
<tr>
<td>S</td>
</tr>
</tbody>
</table>

(a) 345 – 163 = 182
There were **182 more** shirts sold than trousers.

(b) 500 – 182 = 318
There were **318 shirts** left after the sale.

---

For more review questions, please visit www.onsponge.com
Let’s Get Started 1.5

1. 15 + 5 = 20
   Jake had **20 more storybooks** than Toby at first.

**Ask Yourself**

1. The total number of sweets between Nadia and Ernie remained unchanged.
   
   **(a) 620 + 1455 = 2075**
   Shop A had **2015 more tins of paint** at first.
   
   **(b) 3200 – 2075 = 1125**
   Shop B had **1125 tins of paint** at first.

**Think Further**

60 + 20 = 80
Ernie would have **80 more sweets** than Nadia.

Let’s Practise 1.5

**Question 1**

At first

<table>
<thead>
<tr>
<th>J</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>4</td>
</tr>
</tbody>
</table>

End

<table>
<thead>
<tr>
<th>J</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>4</td>
</tr>
</tbody>
</table>

70 – 12 – 12 = 46
Gopal had **46 plastic bottles** at first.
6 – 2 = 4
James’ brother has 4 more biscuits.

(a) 150 + 2050 + 150 = 2350
There were 2350 more sandwiches in the kitchen than on the buffet table at first.

(b) 1u = 3460 – 2350
= 1110
1110 + 150 + 2050 = 3310
There were 3310 sandwiches on the buffet table in the end.

Answers to Unit 1.6 – Repeated Items
Let’s Get Started 1.6
2.

<table>
<thead>
<tr>
<th></th>
<th>C 1u</th>
<th></th>
<th>R 1u</th>
<th>20</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1u</td>
<td></td>
<td>1u</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

3.

<table>
<thead>
<tr>
<th></th>
<th>E 1u</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P 1u</td>
</tr>
<tr>
<td></td>
<td>R 1u</td>
</tr>
</tbody>
</table>

Ask Yourself
1. Sarah.

Think Further
1.

<table>
<thead>
<tr>
<th></th>
<th>J 1u</th>
<th>5</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S 1u</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R 1u</td>
<td>5</td>
<td>73</td>
</tr>
</tbody>
</table>

1u = 30 – 20
= 10
10 + 5 + 93 = 108
Russell had 108 muffins at first.

Let’s Practise 1.6
Question 1

<table>
<thead>
<tr>
<th></th>
<th>K 1u</th>
<th>16</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>K 1u</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B 1u</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1u = 37 – 16 – 11
= 10
10 + 16 + 10 = 36
Susan and Kate have 36 erasers altogether.

For more review questions, please visit www.onsponge.com
Tens = 4 + 3
= 7
Hundreds = 4 + 5
= 9
I am number 974.

34 + 736 = 770
There were 770 more children than men at the theme park.

2 + 4 + 6 + 8 + 10 = 30
He saved $30 by the end of the week.

15 + 2 + 15 = 32
The total age of Chloe and Megan is 32 years.
32 − 11 = 21
Natalie is 21 years old.

15 + 2 + 15 = 32
(a) 1u = 82 ± 35
= 47
The skirt cost $47.
(b) 82 + 47 + 47 + 13 = 189
The total cost of the dress, blouse and skirt is $189.

(a) 277 − 134 = 143
There were 143 children at the basketball match.
(b) 277 + 277 + 431 + 143 = 1128
There were 1128 people at the basketball match.

7000 + 1528 = 8528
There were 8528 DVDs in the afternoon.
8528 − 6520 = 2008
2008 DVDs were loaned out.
Question 6

\[ 3u = 105 \]
\[ 1u = 105 \div 3 \]
\[ = 35 \]
\[ 5u = 5 \times 35 \]
\[ = 175 \]
They donated $175 altogether.

(a) \[ 2500 - 1600 = 900 \]
900 children participated in the event.
(b) \[ 900 - 230 - 230 = 440 \]
440 more boys than girls participated in the event.

Answers to Unit 2.1 - More than / Less than

Let's Get Started 2.1

2.

\[ 5u - 1u = 4u \]
\[ 4u = 8 \]
\[ 1u = 8 \div 4 \]
\[ = 2 \]

3.

\[ 30 \times 3 = 90 \]
\[ 3u = 540 - 90 \]
\[ = 450 \]
\[ 1u = 450 \div 3 \]
\[ = 150 \]

Think Further

At first

\[
\begin{array}{c}
A \\
G \\
B
\end{array}
\]
\[
\begin{array}{c}
1600 \\
230 \\
230 \\
\end{array}
\]
\[ 900 \]
\[ 2500 \]

End

\[
\begin{array}{c}
T \\
K
\end{array}
\]
\[
\begin{array}{c}
1u \\
1u \quad 1u \quad 20
\end{array}
\]

\[ 5u - 2u = 3u \]
\[ 3u = 60 \]
\[ 1u = 60 \div 3 \]
\[ = 20 \]
\[ 20 + 20 + 20 + 20 = 80 \]
Tina had 80 more books than Kelly at first.

Let's Practise 2.1

Question 1

\[ J \]
\[ \begin{array}{c}
1u \\
\end{array} \]
\[ 105 \]

\[ 3u = 105 \]
\[ 1u = 105 \div 3 \]
\[ = 35 \]
\[ 5u = 5 \times 35 \]
\[ = 175 \]
They donated $175 altogether.

Question 2

\[ Y \]
\[ \begin{array}{c}
308
\end{array} \]

\[ 4u = 308 - 52 \]
\[ = 256 \]
\[ 1u = 256 \div 4 \]
\[ = 64 \]
There are 64 blue balls in the box.

Question 3

Each Month

\[ T \]
\[ \begin{array}{c}
12
\end{array} \]

\[ 5 \times 12 = 60 \]
They save $60 each month.
\[ 60 \times 3 = 180 \]
Susan and Tanya will save $180 in 3 months.

Question 4

Each Day

\[ \begin{array}{c}
1 \\
1
\end{array} \]
\[ \begin{array}{c}
1 \quad 2
\end{array} \]
\[ \text{Total} \]
\[ $1 + $1 + $2 = $4 \]
Maggie’s pocket money for 1 day is $4.
\[ 4 \times 11 = 44 \]
Maggie’s pocket money for 11 days is $44.

For more review questions, please visit www.onsponge.com
2. Yes it is possible to solve the problem sum working backwards because there is a comparison at the end.

**Let's Practise 2.2**

**Question 1**

**At first**

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
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<tr>
<td>M</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**End**

<p>| | | |</p>
<table>
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<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1u</td>
<td>60</td>
</tr>
<tr>
<td>M</td>
<td>1u</td>
<td>3u</td>
</tr>
</tbody>
</table>

3u = 60
1u = 60 ÷ 3
= 20

Alan had **20 pebbles** in the end.

**Question 2**

**At first**

<table>
<thead>
<tr>
<th></th>
<th>4u</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>1u</td>
</tr>
<tr>
<td>C2</td>
<td>1u</td>
</tr>
<tr>
<td>C3</td>
<td>1u</td>
</tr>
</tbody>
</table>

3u = 50 – 14
= 36
1u = 36 ÷ 3
= 12

The last child had **12 caramel toffees** in the end.

---

**Ask Yourself**

1. It is necessary to divide the number of cookies by the number of tins because the values used in the model are the number of tins of cookies and not the number of cookies.

2. Yes it is possible to solve the problem sum working backwards because there is a comparison at the end.

---

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At first

4u = 440
1u = 440 ÷ 4
= 110

There were 110 guests in the VIP section at first.

(a) 2u = 24
1u = 24 ÷ 2
= 12
Emma had 12 stickers in the end.
(b) 3u + 12 = 3 × 12 + 12
= 48
The three friends had 48 stickers at first.

Question 3

Question 4

At first

L
H

End

L
H

1u = 92 + 10
= 102
2u = 102 × 2
= 204
Lydia and Hannah had 102 and 204 safety pins respectively in the end.

Question 5

End

G
V

At first

G
V

5u = 350 + 985
1u = 1335 ÷ 5
= 267
Mr Koh's son had $267 at first.

Answers to Unit 2.3 – Internal Transfer
Let's Get Started 2.3

2. At first

T
B

End

T
B

3. At first

T
K

For more review questions, please visit www.onsponge.com
Think Further

1.

Let’s Practise 2.3

Question 1

At first

<table>
<thead>
<tr>
<th>J</th>
<th></th>
<th>6</th>
</tr>
</thead>
</table>

End

<table>
<thead>
<tr>
<th>S</th>
<th></th>
<th>7</th>
</tr>
</thead>
</table>

2u = 7 + 6 + 7
= 20
1u = 20 ÷ 2
= 10

Sulin had 10 hair clips in the end.

Question 2

At first

<table>
<thead>
<tr>
<th>K</th>
<th>12</th>
</tr>
</thead>
</table>

End

<table>
<thead>
<tr>
<th>S</th>
<th>1u</th>
<th>12</th>
<th>12</th>
</tr>
</thead>
</table>

4u = 12 × 3
= 36
1u = 36 ÷ 4
= 9

Kate had 9 stickers in the end.

Question 3

At first

<table>
<thead>
<tr>
<th>3C</th>
<th>4</th>
</tr>
</thead>
</table>

End

<table>
<thead>
<tr>
<th>3E</th>
<th>5</th>
</tr>
</thead>
</table>

2u = 4 + 5 + 5
= 14
1u = 14 ÷ 2
= 7

Primary 3E had 7 posters at the end.

Question 4

At first

<table>
<thead>
<tr>
<th>S</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

End

<table>
<thead>
<tr>
<th>E</th>
<th>1u</th>
<th>4</th>
</tr>
</thead>
</table>

3u = 37 − 16
= 21
1u = 21 ÷ 3
= 7

Ethan had 7 marbles at first.

Question 5

End

<table>
<thead>
<tr>
<th>B</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

At First

<table>
<thead>
<tr>
<th>D</th>
<th>1u</th>
<th>20</th>
</tr>
</thead>
</table>

1u = 100 − 20
= 80
4u = 4 × 80
= 320

Devi’s brother had 320 sweets in the end.
1u = 329 ± 160 = 169

The cost of the tablet is $169.

232 ÷ 4 = 58
Mike had 58 stamps in the end.
58 – 8 = 50
Mike had 50 stamps at first.

Let's Get Started 2.4

2.

3.

Ask Yourself
1. Mr Tan is repeated. Hence, by placing his bar in the middle makes the comparison between the other two men clearer.

Think Further

Let's Practise 2.4

1u = 329 – 160
= 169

The cost of the tablet is $169.

Question 3

1u = 86 + 254
= 340

Frank and David have 1020 marbles altogether.

Question 4

1u = 105 – 30
= 75

1u = 75 ÷ 3
= 25

The belt cost $25.

For more review questions, please visit www.onsponge.com
4u = 166 ± 30
= 136
1u = 136 ÷ 4 = 34
There were 34 strawberries in the first basket.

There were 35 seashells.

Jill collected 35 seashells.

Ask Yourself
1. This tells us that we can apply the Gap & Difference concept.

Think Further
In the previous question and in Let’s Get Started, cases either resulted in a ‘Left-Left’ or ‘Short-Short’ scenario. When this occurs we subtracted the two results to arrive at the Gap. When there is a ‘Left-Short’ or ‘Short-Left’ scenario, we add the two results together to arrive at the Gap.

Let’s Practise 2.5

Question 1

(a) Compare Case 1 and Case 2: There are 3 more (Difference) cookies in each tin.
(b) This results in a gap of: 28 – 16 = 12 cookies.
(c) Subtract the two Results (the last column) 16 – 4 = 12. It is the same as / different than the Gap.

Let’s Get Started 2.5

2.

<table>
<thead>
<tr>
<th>Case</th>
<th>Toy cars</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 1</td>
<td>16 Toy cars</td>
<td>16 – 12 = 4 Left/Short</td>
</tr>
<tr>
<td>Case 2</td>
<td>8 Toy cars</td>
<td>16 – 8 = 8 Left/Short</td>
</tr>
</tbody>
</table>

(a) Compare Case 1 and Case 2: There are 2 more (Difference) toy cars in each box.
(b) This results in a gap of: 12 – 4 toy cars.
(c) Subtract the two Results (the last column) 8 – 4 = 4. It is the same as / different than the Gap.

Question 2

Actual no. of muffins

6 muffins in each box

9 short

6 × 10 = 60
Belinda placed 60 muffins into 10 boxes.
60 – 9 = 51
Belinda baked 51 muffins.
Case 1: Number of pots = 7 × 2 + 17
= 31

Check with Case 2: Number of pots = 7 × 5
= 31 (Checked)

Mrs Lee bakes 31 pots.

Difference between Case 1 and Case 2 = 2 pins for each friend
Results in a Gap = 5 – 1
= 4
Number of friends = 4 ÷ 2
= 2
Case 1: Number of pins = 2 × 7 + 1
= 15
Check with Case 2: Number of pins = 2 × 5 + 5
= 15 (checked)

Reese had 15 pins at first.

Case 1: Number of pins = 2 × 7 + 1
= 15
Check with Case 2: Number of pins = 2 × 5 + 5
= 15 (checked)

Leann had 41 beads.

Difference between Case 1 and Case 2 = 1 bracelet
Results in a Gap = 7 + 1
= 8
1 bracelet = 8 beads
Case 1: Number of beads = 6 × 8
= 48
Check with Case 2: Number of beads = 5 × 8 + 1
= 41 (checked)

Julia had 45 letters.

Difference between Case 1 and Case 2 = 2 letters in each card
Results in a Gap = 25 – 5
= 20
Number of cards = 20 ÷ 2
= 10
Case 1: Number of letters = 10 × 7 – 25
= 45
Check with Case 2: Number of letters = 10 × 5 – 5
= 45 (Checked)

For more review questions, please visit www.onsponge.com
2. The 50 tokens represent the total number of tokens given to the boys and girls.

Think Further
1. The modified problem sums can be solved using the Guess & Check method as the following information has been provided:
   - the total number of children,
   - the total value of the tokens; and
   - the value of tokens awarded to each child.
2. Instead of providing a relationship comparing the number of boys to the number of girls, a second total (i.e. total number of children) was provided.

\[
10u = 20
\]
\[
1u = 20 \div 10 = 2
\]
There were 2 shirts.

Let's Practise 2.6

Question 1

<table>
<thead>
<tr>
<th>Number of boys</th>
<th>Number of tokens boys received</th>
<th>Number of girls</th>
<th>Number of tokens girls received</th>
<th>Total number of tokens</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>21 \times 3 = 63</td>
<td>0</td>
<td>0 \times 6 = 0</td>
<td>63 + 0 = 63</td>
<td>x</td>
</tr>
<tr>
<td>20</td>
<td>20 \times 3 = 60</td>
<td>1</td>
<td>1 \times 6 = 6</td>
<td>60 + 6 = 66</td>
<td>x</td>
</tr>
<tr>
<td>14</td>
<td>14 \times 3 = 42</td>
<td>7</td>
<td>7 \times 6 = 42</td>
<td>84</td>
<td>√</td>
</tr>
</tbody>
</table>

Target difference = 84 – 63 = 21
Gap = 66 – 63 = 3
Number of girls = 21 \div 3 = 7
Difference = 14 – 7 = 7
There were 7 more boys than girls.

Question 2

<table>
<thead>
<tr>
<th>Items</th>
<th>Quantity</th>
<th>\times</th>
<th>Value (buttons)</th>
<th>Total value (buttons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5u</td>
<td>1</td>
<td>1u</td>
<td>5u</td>
</tr>
<tr>
<td>S</td>
<td>1u</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10u = 20
1u = 20 \div 10 = 2
There were 4 yellow candles.

Question 3

<table>
<thead>
<tr>
<th>Items</th>
<th>Quantity</th>
<th>\times</th>
<th>Value (stripes)</th>
<th>Total value (stripes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>2u</td>
<td>3</td>
<td>3u</td>
<td>6u</td>
</tr>
<tr>
<td>Y</td>
<td>1u</td>
<td>2</td>
<td>2u</td>
<td>2u</td>
</tr>
<tr>
<td>Total</td>
<td>3u</td>
<td></td>
<td>8u</td>
<td></td>
</tr>
</tbody>
</table>

6u – 2u = 4u
There were 4u more stripes on the red candles than on the yellow candles.
4u = 16
1u = 16 \div 4 = 4
There were 4 yellow candles.

Question 4

<table>
<thead>
<tr>
<th>Items</th>
<th>Quantity</th>
<th>\times</th>
<th>Value (roses)</th>
<th>Total value (roses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>4u</td>
<td>3</td>
<td>12u</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>1u</td>
<td>6</td>
<td>6u</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5u</td>
<td></td>
<td>18u</td>
<td></td>
</tr>
</tbody>
</table>

6u = 24
1u = 24 \div 6 = 4
18u = 18 \times 4 = 72
There were 72 red roses altogether in the vases and pots.
**Answers to Review Questions Chapter 2**

**Question 1**

- 3 × $4 = $12
- 15 apples cost $12.

- $3 × 5 = 15
- 5 papayas cost $15.

15 Apples | $12
---|---
5 Papayas | $12
0u | $3

(a) Mrs Shakira spent more money on _papayas_.

\$15 – $12 = $3

(b) She spent _$3 more_ on papayas.

**Question 2**

F
M
1u = 7
5u = 5 × 7
= 35
Mel Lin’s father is 35 years old now.

35 + 10 = 45
Mel Lin’s father would be _45 years old_ in 10 years’ time.

**Question 3**

Before
A
B

144
144

4u
?

After
A
B

144
144

5u

4u = 4 × 144
= 576
There was $576 more in Box B than Box A.

576 ÷ 2 = 288

_ $288_ must be moved from Box B to Box A.

**Question 4**

At first

||
---|---|
| Buttons | $15 |
| Beads | $45 |

End

||
---|---|
| Buttons | 1u | 36 |
| Beads | 1u | 36 |

2u = 36
1u = 36 ÷ 2
= 18
6u = 6 × 18
= 108

Sally had _108 beads and buttons_ in total.

**Question 5**

At first

S
X

End

S
X

1u
58
15
89

2u = 89 – 58 – 15
= 16
1u = 16 ÷ 2
= 8
8 + 73 = 81

Xin Ying had _81 stamps_ in the end.

**Question 6**

1st Week Savings

G $15
P $15

2nd Week Savings

G $15
P $15

For more review questions, please visit www.onsponge.com
3u = 45 + 15
   = 60
1u = 60 ÷ 3
   = 20
20 – 15 = 5

Peng Tze saved $5 in the 2nd week.

Answers to Unit 3.1 – Linear Formation

Let’s Get Started 3.1

1. There were 4 gaps.
2. He made 3 cuts.
3. She would need 4 10-cent coins to create the corners.

Ask Yourself

1. There are 4 gaps.
2. There are more trees than gaps as there are trees planted on each side of a gap much like books between two book ends or a football goal is between two goal posts.

Think Further

1. No. When trees are planted around a rectangular shape, two sides of that shape share a common corner. Therefore only 1 tree is planted on that corner.

Let’s Practise 3.1

Question 1

11 – 1 = 10
There are 10 gaps between 11 poles.
10 × 75 m = 750 m
The total distance between the first and the last pole is 750 m.

Question 2

4 – 1 = 3
There are 3 gaps between the 1st and 4th flower pot.
15 m ÷ 3 = 5 m
The distance between each flower pot is 5 m.

Question 3

4 + 1 = 5
There are 5 ribbons after 4 cuts.
20 ÷ 5 = 4
Each small piece is 4 m long.

Question 4

84 marbles – 4 marbles (at the corners) = 80 marbles
80 ÷ 4 = 20
20 + 2 (2 corners) = 22
There are 22 marbles on one side of the square.

Question 5

105 steps – 3 steps (at the corners) = 102 steps
102 ÷ 3 = 34
34 + 2 (steps at the corner) = 36 steps
She left 36 foot prints on each side of the triangle.

Question 6

There are 10 gaps between the 1st and the 11th light.
100 m ÷ 10 = 10 m
The distance between each light is 10 m.

Answers to Unit 3.2 – Regular Gaps

Let’s Get Started 3.2

1. Change: increase by 3
2. Change: Increase by 2 dots

Ask Yourself

1. Yes, the number of shapes increased by 3 in each subsequent figure.
2. For each figure number, there is one row of 3 shapes. Eg. Figure 1 has 1 row, Figure 2 has 2 rows, Figure 3 has 3 rows, etc.
   The number of shapes → Figure no. × 3

Think Further

1. The approach to determining the patterns of the figures will not change as the number of shapes still increased by 3 in each subsequent figure.

Let’s Practise 3.2

Question 1

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Number of Buttons</th>
<th>Number of button holes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

Figure number × 1  Figure number × 2

(a) 5 × 2 = 10

There are 10 button holes in Figure 5.
(b) $17 \times 2 = 34$
There are 34 button holes.
(c) $22 \div 2 = 11$ buttons
There are 11 buttons.

Question 2

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Number of Tables</th>
<th>Number of chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

(b) $5 \times 2 + 2 = 12$

12 people can sit on 5 such tables.

(b) $10 \times 2 + 2 = 22$
There are 22 chairs in Figure 10.

(c) $120 - 2 = 118$
$118 \div 2 = 59$

59 tables can sit 120 people.
(Check: $59 \times 2 + 2 = 120$)

Question 3

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Number of shapes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

(a) $5 \times 3 + 1 = 16$

There are 16 shapes in figure 5.

(b) $10 \times 3 + 1 = 31$

31 – 16 = 15
There are 15 more shapes in Figure 10 than Figure 5.

(c) $28 - 1 = 27$
$27 \div 3 = 9$

There are 28 shapes in Figure 9.

Question 4

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Number of clouds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

(a) No. of clouds in Figure 6 → $6 \times 2 - 1 = 11$
11 clouds
(b) No. of clouds in Figure 21 → $21 \times 2 - 1 = 41$
41 clouds
(c) When there are 35 clouds,
$35 + 1 = 36$
$36 \div 2 = 18$

Figure 18 has 35 clouds.

Question 5

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Number of Sticks</th>
<th>Number of dots</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>11</td>
</tr>
</tbody>
</table>

(a) $6 \times 2 = 12$
There are 12 sticks in Figure 6.
(b) $20 \times 3 + 2 = 62$
62 dots are needed to form Figure 20.
(c) $30 \times 3 + 2 = 92$
There are 92 dots in Figure 30.
$30 \times 2 = 60$
There are 60 sticks in Figure 30.
$92 - 60 = 32$
There are 32 more dots than sticks in Figure 30.
(d) $80 \div 2 = 40$
There are 80 sticks in Figure 40.
(e) $122 - 2 = 120$
$120 \div 3 = 40$
There are 122 dots in Figure 40.

For more review questions, please visit www.onsponge.com
**Answers to Review Questions Chapter 3**

**Question 1**

\[ 6 - 1 = 5 \]

There are 5 gaps between the 1st and the 6th toy soldier.

\[ 20 \text{ cm} \div 5 = 4 \text{ cm} \]

The length of each gap is 4 cm.

\[ 120 \div 5 = 30 \]

The are 30 gaps between the 1st and the last toy soldier.

\[ 30 + 1 = 31 \]

There are 31 toy soldiers.

---

**Question 2**

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Number of Shapes</th>
<th>Number of arrow-heads</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>

- \[ 10 \times 4 = 40 \]
  
  There are **40 arrowheads** in Figure 10.

- \[ 108 \div 4 = 27 \]
  
  There are 108 arrowheads in **Figure 27**.

**Question 3**

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Number of shapes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>

- \[ 9 \times 3 - 8 = 19 \]
  
  There are **19 stars** in Figure 9.

- \[ 35 \times 3 - 8 = 97 \]
  
  There are **97 stars** in Figure 35.

- \[ 58 + 8 = 66 \]
  
  \[ 66 + 3 = 22 \]
  
  There are 58 stars in **Figure 22**.

---

<table>
<thead>
<tr>
<th>Figure number</th>
<th>Number of Circles</th>
<th>Number of Sticks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 + 4</td>
<td>4 + 8</td>
</tr>
<tr>
<td>2</td>
<td>6 + 4</td>
<td>12 + 8</td>
</tr>
<tr>
<td>3</td>
<td>10 + 4</td>
<td>20 + 8</td>
</tr>
</tbody>
</table>

- \[ 7 \times 4 - 2 = 26 \]
  
  There are **26 circles** in Figure 7.

- \[ 32 \times 4 - 2 = 126 \]
  
  There are **126 circles** in Figure 32.

- \[ 236 \div 2 = 118 \]
  
  \[ 118 + 2 = 120 \]
  
  \[ 120 \div 4 = 30 \]
  
  There are 236 sticks in **Figure 30**.

---

**Answers to Chapter 4 – Length**

**Let’s Get Started 4**

1. \[ 2 \text{ m} 15 \text{ cm} = 215 \text{ cm} \]
2. \[ 4 \text{ m} 98 \text{ cm} = 498 \text{ cm} \]
3. \[ 567 \text{ cm} = 5 \text{ m} 67 \text{ cm} \]
4. \[ 3023 \text{ cm} = 30 \text{ m} 23 \text{ cm} \]
5. \[ 3 \text{ km} 680 \text{ m} = 3680 \text{ m} \]
6. \[ 4 \text{ km} 34 \text{ m} = 4034 \text{ m} \]
7. \[ 5890 \text{ m} = 5 \text{ km} 890 \text{ m} \]
8. \[ 298 \text{ m} = 0 \text{ km} 298 \text{ m} \]

**Ask Yourself**

1. No, as the units for both lengths are the same.
2. Yes, ‘longer than’. Similar to the More than/ Less than concept, you can solve this problem sum using the model–drawing approach.

**Think Further**

\[
\begin{vmatrix}
S & 1u & 12 \\
R & 1u & 60
\end{vmatrix}
\]

\[ 2u = 60 - 12 \]
\[ = 48 \]
\[ 1u = 48 \div 2 \]
\[ = 24 \]

The solution would differ from the solution above.
Let's Practise 4

Question 1

\[ 28 - 15 = 13 \]
\[ 128 - 13 = 115 \]
Sharon's height is **115 cm**.

Question 2

\[ 120 \text{ cm} - 44 \text{ cm} = 76 \text{ cm} \]
The length of the second piece of ribbon is 76 cm.
\[ 211 \text{ cm} + 76 \text{ cm} + 120 \text{ cm} = 407 \text{ cm} \]
The length of the string before it was cut was **4 m 7 cm**.

Question 3

\[ 320 \text{ m} - 15 \text{ m} = 305 \text{ m} \]
305 m of the bridge was painted on the second day.
\[ 2000 \text{ m} - 305 \text{ m} - 320 \text{ m} = 1375 \text{ m} \]
**1 km 375 m** of the bridge was not painted.

Question 4

\[ 2630 \text{ m} - 2122 \text{ m} = 508 \text{ m} \]
The car was 508 m ahead of the lorry at noon.
\[ 1040 \text{ m} - 508 \text{ m} = 532 \text{ m} \]
The car was **532 m** away from the town at noon.

**Question 5**

At first

\[ 91 \div 7 = 13 \text{ blocks} \]
There were 13 blocks that remained.
\[ 2u = 13 - 3 \]
\[ = 10 \]
\[ 1u = 10 \div 2 \]
\[ = 5 \]
There were 5 block on the second tower in the end.

End

\[ 1u \]
\[ 3 \]
\[ 4 \]

**Question 6**

\[ 31 \text{ cm} - 22 \text{ cm} = 9 \text{ cm} \]
The distance between Liam and Jiemin was 9 cm.
\[ 5 \times 9 \text{ cm} = 45 \text{ cm} \]
Liam hopped **45 cm further** than Jiemin.

**Question 7**

Total length of road = 900 cm

**End** (Equal length to be painted)

\[ A \]
\[ \hspace{1cm} \]
\[ \hspace{1cm} \]
\[ \hspace{1cm} \]
\[ \hspace{1cm} \]
\[ B \]
\[ 450 \text{ cm} \]

**At first**

\[ A \]
\[ \hspace{1cm} \]
\[ \hspace{1cm} \]
\[ \hspace{1cm} \]
\[ \hspace{1cm} \]
\[ B \]
\[ 230 \]
\[ 70 \]
\[ ? \]

(a) \[ 450 \text{ cm} - 300 \text{ cm} = 150 \text{ cm} \]
Painter A had 150 m of the road left to paint
(b) \[ 450 \text{ cm} - 230 \text{ cm} = 220 \text{ cm} \]
Painter B had 220 m of the road left to paint.
\[ 220 \text{ cm} - 150 \text{ cm} = 70 \text{ cm} \]
Painter A had **70 cm less** left to paint.

For more review questions, please visit www.onsponge.com
Question 8

\[5u = 90\]
\[1u = 90 \div 5\]
\[= 18\]
\[18 + 10 + 40 = 68\]
The length of the Ribbon A is \textbf{68 cm} in the end.

Question 9

\[5u = 155 - 5\]
\[= 150\]
\[1u = 150 \div 5\]
\[= 30\]

Gill received \textbf{30 m} of the crepe paper.

Question 10

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>\times</th>
<th>Value ($)</th>
<th>Total value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shop A</td>
<td>2u</td>
<td>\times</td>
<td>3</td>
<td>6u</td>
</tr>
<tr>
<td>Shop B</td>
<td>1u</td>
<td>\times</td>
<td>4</td>
<td>4u</td>
</tr>
<tr>
<td>Total</td>
<td>3u</td>
<td></td>
<td></td>
<td>10u</td>
</tr>
</tbody>
</table>

\[10u = 170\]
\[1u = 170 \div 10\]
\[= 17\]

Mrs Chua bought \textbf{17 m} of fabric from Shop B.

Answers to Chapter 5 – Mass

Let’s Get Started 5

1. 
   a) 2000 g  
   b) 2780 g  
   c) 4080 g  
   d) 8009 g

2. 
   a) 3 kg  
   b) 8 kg 90 g  
   c) 3 kg 7 g  
   d) 6 kg 60 g

3. 
   a) 5 kg 600 g \rightarrow 5600 g
   2 kg 300 g \rightarrow 2300 g
   5600 + 2300 = 7900
   7900 \rightarrow 7 kg 900 g

   b) 9 kg 900 g = 9900 g
   3 kg 600 g = 3600 g
   9900 – 3600 = 6300
   6300 g \rightarrow 6 kg 300 g

   c) 7 kg 450 g \rightarrow 7450 g
   5 kg 890 g \rightarrow 5890 g
   7450 – 5890 = 1560
   1560 g \rightarrow 1 kg 560 g

4. 
   a) 3 kg 750 g
   b) 5 kg
   c) 1 kg 125 g
   d) 6 kg
   e) 1 kg 200 g

Ask Yourself

1. The key words are ‘If-If.’ Problem sums involving ‘If-If’ may be solved using the Gap and Difference concept presented in Chapter 2.5.

Let’s Practise 5

Question 1

\[\text{Mass of sugar}\]
\[\text{C1} \quad 5 \text{ muffins} \quad 600 \text{ g}\]
\[\text{C2} \quad 5 \text{ muffins} \quad 300 \text{ g}\]

\[\text{Gap} = 600 + 300 = 900\]

Case 1: \[5 \times 900 + 300 = 4500\]

Bao Ming has \textbf{4800 g} of sugar.

Check using Case 2: \[6 \times 900 g - 600 g = 4800 g\]

Question 2

\[\text{P} \quad 2758\]
\[\text{W} \quad 2758 \quad 230\]

\[2758 \text{ g} + 230 \text{ g} = 2988 \text{ g}\]

The mass of the watermelon is 2988 g.

\[2988 \text{ g} + 2758 \text{ g} = 5746 \text{ g}\]

The total mass of the fruits is \textbf{5746 g}.
Question 3

A
K
H

? 38

38

25

13

(a) 38 - 13 = 25
38 + 25 = 63
Harry's mass is 63 kg.

(b) 38 + 38 = 76
Kievan's mass is 76 kg.
38 + 76 + 63 = 177
The total mass of the three people is 177 kg.

Question 4

T+J
J+H

T
H

1u
2

2u = 78 - 2
= 76
1u = 76 ÷ 2
= 38
Tina has 38 kg of feathers.
80 - 38 = 42
38 + 2 = 40
Jessica and Hilda have 42 kg and 40 kg of feathers respectively.

Question 5

1st
2nd
3rd

1u
5

1u
5

1u
1u
5

1u
5

1u = 27 - 5
= 22
6 x 22 + 15 = 147
The total mass of the three baskets of fruits is 147 kg.

Question 6

C1
C2

4 kg each bag
4 kg each bag

11 kg
2 kg each

Gap = 11 + 5
= 16

Case 1: 8 x 4 + 11 = 43
Farmer Han had 43 kg of sugar.
Case 2: 8 x 6 - 5 = 43 (checked)

Question 7

R R P R R P R R

3 x 23 - 62 = 7
The mass of each bag of rice is 7 kg.
2 x 7 - 14 = 9
The mass of the bag of potatoes is 9 kg.

Question 8

C 1u
M 1u

1u = 625 - 175
= 450
5 x 450 = 2250
The mass of 5 cartons of milk is 2250 g.
2250 + 625 = 2875
The total mass of the items was 2875 g.

Question 9

<table>
<thead>
<tr>
<th>Items</th>
<th>Quantity</th>
<th>×</th>
<th>Value (g)</th>
<th>Total value (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1u</td>
<td>6</td>
<td></td>
<td>6u</td>
</tr>
<tr>
<td>P</td>
<td>1u</td>
<td>4</td>
<td></td>
<td>4u</td>
</tr>
<tr>
<td>Total</td>
<td>2u</td>
<td></td>
<td></td>
<td>10u</td>
</tr>
</tbody>
</table>

10u = 1710
1u = 1710 ÷ 10
= 171
171 x 2 = 342
Sarah bought a total of 342 bags of fruits.

For more review questions, please visit www.onsponge.com
Question 3
(a) $1000 \pm 250 = 750$

750 ml of soya bean milk was poured into 5 cups.
$750 \div 5 = 150$

150 ml of soya bean milk was poured into each cup.
(b) $250 - 150 = 100$

William drank 100 ml less soya bean milk than mother.

Let’s Practise 6

Question 1

<table>
<thead>
<tr>
<th>A</th>
<th>1u</th>
<th>1032</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1u</td>
<td>2000</td>
</tr>
</tbody>
</table>

$2u = 8036 - 2000$
$= 6036$
$1u = 6036 \div 2$
$= 3018$

3018 ml = 3 l 18 ml

Container A has 3 l 18 ml of fruit punch.

Question 2

(a) $200 \times 5 = 1000$

Philip bought 1000 l of juice.

(b) $210 \times 10 = 2100$

Philip bought 2100 l of mineral water.

$2100 - 1000 = 1100$

Phillip bought 1100 l more mineral water than juice.

Question 3

(a) $1000 - 250 = 750$

750 ml of soya bean milk was poured into 5 cups.

$750 \div 5 = 150$

(b) $250 - 150 = 100$

William drank 100 ml less soya bean milk than mother.
Question 4

(a) \(350 \times 8 = 2800 \text{ ml}\)
   The kettle can hold a total of 2800 ml of water.
(b) \(2800 - 2100 = 700\)
   The kettle needs another 700 ml of water before it overflows.
   \[350 + 350 = 700\]
   The kettle can still hold another 2 mugs of water before it overflows.

Question 5

At first

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

End

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>42</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>37</td>
<td>5</td>
</tr>
</tbody>
</table>

\[50 - 8 = 42\]

42 ml of water was poured out from Container A.

\[42 - 37 = 5\]

5 ml of water was poured out of Container B.

Question 6

At first

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1u</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>1u</td>
<td>12</td>
<td>3</td>
</tr>
</tbody>
</table>

\[3u = 12\]
\[1u = 12 \div 3\]
\[= 4\]

There was 4 ℓ of cooking oil in the end.

\[4 + 15 = 19\]

There was 19 ℓ of cooking oil at first.

Question 7

At first

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1u</td>
<td>1300</td>
<td>800</td>
</tr>
</tbody>
</table>

\[2u = 3900 - 1300 - 800\]
\[= 1800\]
\[1u = 1800 \div 2\]
\[= 900\]

There were 900 ml of detergent in the blue can at first.

\[900 + 1300 = 2200\]

2200 ml = 2 ℓ 200 ml

There were 2 ℓ 200 ml of detergent in each can in the end.

Question 8

At first

<table>
<thead>
<tr>
<th></th>
<th>JH</th>
<th>JM</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[4u = 800\]
\[1u = 800 \div 4\]
\[= 200\]

Mother prepared 200 ml of guava juice for Jiahui.
Let's Get Started 7.1

Start time: 6.45 a.m.
End time: 7.55 a.m.

Total time taken = 15 min + 55 min
= 70 min
Since 60 min is 1 hour, 70 min = 1 h 10 min
ok 1 h 10 min to reach his workplace.

Let's Practise 7.1

Question 1

30 min

45 min

6.30 a.m.

7 a.m.

7.45 a.m.

Time he ran = 30 min + 45 min
= 75 min
75 min = 1 h 15 min
He ran for 1 h 15 min.

Question 2

55 min

1 h

2.05 p.m.

3 p.m.

4 p.m.

55 min + 1 h = 1 h 55 min
The ferry ride was 1 h 55 min.

Ask Yourself

1. Kendra started her Ballet lesson at 9.30 a.m.
2. Kendra ended her Ballet lesson at 10.45 a.m.
3. To find the duration, you will need to draw a time line.

Let's Practise 7.1

Question 1

3u = 1700 + 3682
= 5382
1u = 5382 ÷ 3
= 1794
Tank Z contained 1794 mℓ of water at first.
1794 – 50 = 1744
1744 mℓ = 1 ℓ 744 mℓ
There were 1 ℓ 744 mℓ of water in Tank Z in the end.

Question 10

A

60

220

266

486

B

60

220

60

There is a difference of 546 mℓ of water between Pail A and Pail B.

Answers to Chapter 7.1 – Finding the Duration of Time Interval

Question 9

Z

X

Y

1700

3682

60 + 486 = 546
There was a difference of 546 mℓ of water between Pail A and Pail B.
Ask Yourself

1. The time needed to bake the cake was 2 h 10 min.
2. To find the duration, you will need to draw a time line and work backwards.

Let’s Practise 7.2

Question 1

She left home at 2.35 p.m.

Question 2

Tom’s wife had her lunch at 11.40 a.m.

Question 3

The programme lasted 75 min.

Answers to Unit 7.2 – Finding Start Time

Let’s Get Started 7.2

End time: 12.20 p.m.
Start time: ?
Duration: 1 h 45 min = 60 min + 45 min = 105 min

Ben’s watch showed 5.35 p.m.

Question 4

Kim started swimming at 9.10 a.m.

Answers to Unit 7.3 – Finding End Time

Let’s Get Started 7.3

Start time: 6.15 a.m.
End time: ?

For more review questions, please visit www.onsponge.com
Duration: 2 h 25 min

To find the start time, we count in clockwise direction. The first runner ended the race at 8.40 a.m.

**Ask Yourself**
1. She started doing her homework at 5.30 p.m.
2. She took 1 h 40 min to complete her homework.

**Let’s Practise 7.3**

**Question 1**

![Clock diagram](image)

Since 1 h = 60 min, 2 h = 120 min

2 h 35 min = 120 min + 35 min

= 155 min

1 h 45 min = 60 min + 45 min

= 105 min

155 min – 105 min = 50 min

It is 50 min faster.

**Question 2**

![Clock diagram](image)

The train left Town B at 1.35 p.m.

The clinic opens for 7 h 30 min each day.

**Question 3**

![Clock diagram](image)

Mme. Lee reached home at 12.50 p.m.

**Question 4**

![Clock diagram](image)

(a) Since 1 h = 60 min, 2 h = 120 min

2 h 35 min = 120 min + 35 min

= 155 min

1 h 45 min = 60 min + 45 min

= 105 min

155 min – 105 min = 50 min

It is 50 min faster.

(b)
4.
Since 1 h = 60 min, 2 h = 120 min
2 h 15 min = 120 min + 15 min
= 135 min
(a) 135 min – 25 min = 110 min
110 min = 60 min + 50 min
= 1 h 50 min
Lucy spent 1 h 50 min walking around the zoo.
(b)

Let's Get Started 8.1

1. 5 small divisions = 20
small division = 20 ÷ 5
= 4
Lucy arrived at the zoo at 1.30 p.m.

5.
1 h 10 min = 70 min
70 min + 70 min = 140 min

Let's Practise 8.1

Question 1
Number. of computers sold

<table>
<thead>
<tr>
<th>Months</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10</td>
<td>14</td>
<td>36</td>
<td>12</td>
<td>4</td>
<td>32</td>
</tr>
</tbody>
</table>

6.
Since 60 min = 1 h, 120 min = 2 h,
170 min = 120 min + 50 min
= 2 h 50 min

Ask Yourself
1. 5 small divisions = 20
small division = 20 ÷ 5
= 4
Let's Get Started 8.1

1. 4 fish make 100.
Hence, 8 fish make 200.
2. 8 = 13 – 8
= 5
5 = 8 – 5
= 3
8 × 5 = 5 × 3
= 15

Let's Practise 8.1

Question 1
Number. of computers sold

For more review questions, please visit www.onsponge.com
(a) $4 \times 30 = 120$

Four times of Candice’s money was $120.

75 + 45 = 120

**Belinda** and **Dorothy** spent 4 times the amount that was spent by Candice.

(b) $80 + 75 + 30 + 45 + 55 = 285$

The girls spent a total of **$285** during the holidays.

---

**Question 2**

<table>
<thead>
<tr>
<th>Amount of money spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anna</td>
</tr>
<tr>
<td>80</td>
</tr>
</tbody>
</table>

---

**Question 3**

<table>
<thead>
<tr>
<th>Number of cars sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
</tr>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

(a) $2 \times 6 = 12$

Harry sold twice the number of cars in **February** and **April** than in June.

(b) $10 \times 150 = 1500$

He received **$1500** in the month of May.

---

**Question 4**

<table>
<thead>
<tr>
<th>Number of cups of fruit juice sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
</tr>
<tr>
<td>20</td>
</tr>
</tbody>
</table>

20 + 14 + 4 + 10 + 14 = 62
78 - 62 = 16

**Mr Lim** sold **16 cups of melon juice**.

---

**Question 5**

(a) Henry: $7 \times 2 = 14$
Ian: $4 \times 2 = 8$
Jason: $6 \times 2 = 12$
Kyle: $3 \times 2 = 6$
Leon: $9 \times 2 = 18$

$14 + 8 + 12 + 6 + 18 = 58$

They read **58 books** altogether.

(b) Number of books read

<table>
<thead>
<tr>
<th>Henry</th>
<th>Ian</th>
<th>Jason</th>
<th>Kyle</th>
<th>Leon</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>8</td>
<td>12</td>
<td>6</td>
<td>18</td>
</tr>
</tbody>
</table>

---

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Think Further

1. \(3 \times \$50 = \$150\)
   
   \(1 \times \$10 = \$10\)
   
   \(1 \times \$5 = \$5\)

   \(\$150 + \$10 + \$5 = \$165\)

   She had 3 $50-notes, 1 $10-note, 1 $5-note, at first.

Let’s Practise 9.1

Question 1

One $2-note = $2

Two 50¢ coins = 50¢ + 50¢

= $1

One 20¢ coin = 20¢

= $0.20

Two 10¢ coins = 10¢ + 10¢

= 20¢ = $0.20

\(\$2 + \$1 + \$0.20 + \$0.20 = \$3.40\)

Christopher received $3.40 from his father.

\(\$13.60 + \$3.40 = \$17\)

Christopher had $17 in the end.

Question 2

\(3411 + 2622 = 6033\)

Mr Lee gave $6033 to his wife and children.

\(10\,000 – 6033 = 3967\)

He saved $3967 of his bonus.

Question 3

\(2415 + 1259 = 3674\)

Max and Norman received $3674.

\(5500 – 3674 = 1826\)

Omar received $1826.
Question 4

(a) \(800 - 189 - 302 = 309\)
She spend $309 on food.
(b) \(302 + 309 = 611\)
She spend $611 on transport and food.

Question 5

\[644 + 432 = 1076\]
Family A and B received $1076.
\[3126 - 1076 = 2050\]
Family C received $2050.

Question 6

(a) \(8254 - 3625 = 4629\)
The bedroom set cost $4629.
(b) \(4629 - 3625 = 1004\)
The bedroom set cost $1400 more.

Question 7

\[289 + 79.90 = 368.90\]
The total cost of oven and waffle maker is $368.90.
\[368.90 - 340 = 28.90\]
She needs $28.90 more.

Question 8

\[2344 + 886 = 3230\]
$3230 were given away.
\[6600 - 3230 = 3370\]
$3370 was left.

Question 9

\[50 \times 3 = 150\]
Mrs See gave the cashier $150.
\[150 - 89.90 - 39.90 = 20.20\]
She received $20.20 change.

Question 10

\[142 + 142 + 56 = 340\]
The two girls have $340 altogether.

Answers to Chapter 9.2

Let’s Get Started 9.2

2. B
   \[
   \begin{array}{c}
   \text{O} \\
   \text{W}
   \end{array}
   \]
   \[
   \begin{array}{c|c}
   \text{O} & \text{W} \\
   \hline
   79.90 & 79.90
   \end{array}
   \]
   \[
   \begin{array}{c|c}
   \text{O} & \text{W} \\
   \hline
   209.10 & 79.90
   \end{array}
   \]

3. F
   \[
   \begin{array}{c|c}
   \text{O} & \text{W} \\
   \hline
   52 & 67
   \end{array}
   \]
   \[
   \begin{array}{c|c}
   \text{O} & \text{W} \\
   \hline
   52 & 67
   \end{array}
   \]
   \[
   \begin{array}{c|c}
   \text{O} & \text{W} \\
   \hline
   67 & 23
   \end{array}
   \]

4. Fr
   \[
   \begin{array}{c|c}
   \text{O} & \text{W} \\
   \hline
   220 & 220
   \end{array}
   \]
   \[
   \begin{array}{c|c}
   \text{O} & \text{W} \\
   \hline
   50 & 50
   \end{array}
   \]
   \[
   \begin{array}{c|c|c}
   \text{O} & \text{W} & \text{W} \\
   \hline
   220 & 220 & 35
   \end{array}
   \]
Let’s Practise 9.2

Question 1

(a) \(89 + 42 = 131\)
Gayle had \$131. 
(b) \(89 + 131 = 220\)
They had \$220 altogether.

Question 2

(a) \(96 + 88 = 184\)
Julia has \$184. 
(b) \(184 + 96 = 280\)
They had \$280 altogether.

Question 3

(a) \(502 - 138 = 364\)
Elliot had \$364. 
(b) \(502 + 364 = 866\)
They had \$866 altogether.

Think Further

\[82 - 45 = 37\]
He saved \$37 more in March than in January.

Question 4

3.20 + 6.25 = 9.45
The durian cost \$9.45. 
3.20 + 9.45 = 12.65
The total cost of the durian and papaya is \$12.65.

Question 5

At first

100 ± 35 = 65
Lucy had \$65 at first.

For more review questions, please visit www.onsponge.com
Question 6

At first

\[
\begin{array}{c|c}
R & 68 \\
H & 68 20 \\
\end{array}
\]

After

\[
\begin{array}{c|c}
K & 23 45 \\
L & 23 45 20 45 \\
\end{array}
\]

\[68 - 45 = 23\]

Richard has $23 in the end.

\[45 + 20 + 45 = 110\]

Hasnah has $110 more than Richard.

---

Question 7

At first

\[
\begin{array}{c|c|c}
A & 285 \\
H & \text{ } \\
\end{array}
\]

Change

\[
\begin{array}{c|c|c}
A & 240 \\
H & 240 278 27 \\
\end{array}
\]

\[240 + 278 + 285 = 803\]

Haim had $803 at first.

\[803 - 545 = 258\]

The bag cost $258.

---

Question 8

At first

\[
\begin{array}{c|c|c|c}
U & 1u 40.70 5.70 \\
A & 1u 40.70 \\
\end{array}
\]

\[39 + 1.70 = 40.70\]

Aunt Maggie spent $40.70

After

\[
\begin{array}{c|c|c|c|c}
U & 1u 40.70 5.70 \\
A & 1u 40.70 \\
\end{array}
\]

\[484.40 - 40.70 - 5.70 = 438\]

They have a total of $438 in the end.

\[438 ÷ 2 = 219\]

Aunt Maggie had $219 in the end.

---

Question 9

At first

\[
\begin{array}{c|c|c}
M & 2437 575 \\
A & 2437 \\
S & 1385 \\
\end{array}
\]

\[2437 + 575 = 3012\]

Michelle had $3012.

\[3012 + 2437 + 1385 = 6834\]

The three children have $6834 altogether.

---

Question 10

\[
\begin{array}{c|c|c}
L & 126 \\
H & 126 256 \\
\end{array}
\]

\[126 + 256 = 382\]

Hwee Ping received $382

\[382 + 126 = 508\]

The two sisters received $508 from their mother.
Question 1

(a) 256 – 215 = 41
Tiara had $41 more than Charmaine.

(b) 215 – 129 = 86
Charmaine had $86.
129 + 127 + 86 = 342
They had $342 altogether.

Question 2

At first

<table>
<thead>
<tr>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>325</td>
<td>20</td>
</tr>
</tbody>
</table>

End

<table>
<thead>
<tr>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>325</td>
<td>20</td>
</tr>
</tbody>
</table>

325 + 20 + 20 = 365
Each girl saved $365 at first.

Question 3

J

| 2365 |

L

| 2365 |

7885

7885 – 2365 = 5520
He spent $5520 more in London than Japan.

Question 4

<table>
<thead>
<tr>
<th>Pens</th>
<th>Pens $</th>
<th>Rulers</th>
<th>Rulers $</th>
<th>Total $</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>15 × 2 = 30</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>x</td>
</tr>
<tr>
<td>14</td>
<td>14 × 2 = 28</td>
<td>1</td>
<td>1</td>
<td>29</td>
<td>x</td>
</tr>
<tr>
<td>5</td>
<td>5 × 2 = 10</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>√</td>
</tr>
</tbody>
</table>

10 ÷ 1 = 10
15 – 10 = 5
He bought 10 rulers and 5 pens.

Question 5

At first

<table>
<thead>
<tr>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>560</td>
</tr>
</tbody>
</table>

End

<table>
<thead>
<tr>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1u</td>
</tr>
<tr>
<td>1u</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
</tr>
<tr>
<td>130</td>
</tr>
</tbody>
</table>

560 – 300 = 260
His brother received $260.
560 + 260 = 820
They received a total of $820 at first.

(b) 2u = 820 – 130
= 690
1u = 690 ÷ 2
= 345
Hashim must have $345 in the end.
560 – 345 = 215
Hashim must give his brother $215.

Question 6

End

<table>
<thead>
<tr>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.50</td>
</tr>
<tr>
<td>44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.50</td>
</tr>
<tr>
<td>44</td>
</tr>
</tbody>
</table>

232.40 – 47.50 = 184.90
He spent $184.90 more in London than Japan.

For more review questions, please visit www.onsponge.com
232.40 - 47.50 = 184.90
Dan had $184.90 at first.
184.90 + 184.90 + 3.50 = 373.30
They had $373.30 in total at first.

| 480 | 180 |
| 480 | 180 | 250 |

(a) $480 + 180 + 250 = 910$
Giselle had $910.
(b) $480 + 180 = 660$
Ling had $660.
$480 + 660 + 910 = 2050$
The three girls had $2050 altogether.

| T  | 1u  | 225 |
| B  | 1u  |
| M  | 1u  | 1369 |

1u = 5243 - 1369
= 3874
3874 + 255 = 4129
The ceramic table cost $4129.

Question 9
1E = $2.50
1P = $2.50 - $1
= $1.50

<table>
<thead>
<tr>
<th>E</th>
<th>1u</th>
<th>x</th>
<th>2.50</th>
<th>2.5u</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>5u</td>
<td>x</td>
<td>1.50</td>
<td>7.5u</td>
</tr>
<tr>
<td>Total</td>
<td>6u</td>
<td>-</td>
<td>-</td>
<td>10u</td>
</tr>
</tbody>
</table>

10u = 80
1u = 80 ÷ 10
= 8
James bought 8 erasers.

W
| W  | 80 |
| S  | 80 |

(a) $600 ÷ 2 = 300$
Winnie must give Sharifah $300.
(b) $600 + 80 + 80 = 760$
The two girls have $760 altogether.

| 523 | 126 |

3u = 150
1u = 150 ÷ 3
= 50
Sandy has 50 $5-notes.

Mon | Tue | 2365 |

(a) 523 + 126 = 649
Veronica spent $649 on Tuesday.
523 + 649 = 1172
Veronica spent $1172 in total.
(b) 1172 + 2365 = 3537
Veronica had $3537 at first.
Let's Get Started 10.1

Figure 1

1. When comparing fractions with the same numerators, the smallest fraction is the one with the greatest denominator.
2. When comparing fractions with the same denominators, the smallest fraction is the one with the smallest numerator.

Let's Practise 10.1

Question 1

\[
\begin{array}{cccc}
\frac{4}{5} & \frac{4}{6} & \frac{4}{9} & \frac{4}{12} \\
\end{array}
\]

Question 2

\[
\begin{array}{cccc}
\frac{9}{12} & \frac{7}{12} & \frac{5}{12} & \frac{2}{12} \\
\end{array}
\]

Question 3

\[
\begin{array}{cccc}
\frac{3}{4} & \frac{3}{5} & \frac{3}{7} & \frac{3}{9} \\
\end{array}
\]

Question 4

\[
\begin{array}{cccc}
\frac{8}{11} & \frac{6}{11} & \frac{5}{11} & \frac{3}{11} \\
\end{array}
\]

Question 1

\[
\begin{array}{cccc}
\frac{2}{9} & \frac{5}{9} & \frac{7}{9} & \frac{8}{9} \\
\end{array}
\]

Question 2

\[
\begin{array}{cccc}
\frac{2}{12} & \frac{2}{7} & \frac{2}{5} & \frac{2}{3} \\
\end{array}
\]

Question 3

\[
\begin{array}{cccc}
\frac{6}{11} & \frac{6}{9} & \frac{6}{8} & \frac{6}{7} \\
\end{array}
\]

Question 4

\[
\begin{array}{cccc}
\frac{1}{9} & \frac{3}{9} & \frac{5}{9} & \frac{8}{9} \\
\end{array}
\]

For more review questions, please visit www.onsponge.com
Answers to Chapter 10.2 Part Whole Fraction

Let’s Get Started 10.2

2.

<table>
<thead>
<tr>
<th>Parcel</th>
<th>Books</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/7</td>
<td>3/7</td>
<td>2/7</td>
</tr>
</tbody>
</table>

3.

<table>
<thead>
<tr>
<th>Neighbours</th>
<th>Dan</th>
<th>Elsie</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/8</td>
<td>2/8</td>
<td>2/8</td>
</tr>
</tbody>
</table>

Ask Yourself

1. The 12 m represents the whole while the 3 m and the 7 m represent the parts.

Think Further

1. The fraction could not be greater than $\frac{3}{6}$ because the sum of the parts would be greater than the total whole. i.e. The sum of the pieces of the wire would exceed the total amount of 12 m. This is not possible.

Let’s Practise 10.2

Question 1

<table>
<thead>
<tr>
<th>yellow</th>
<th>blue</th>
<th>uncoloured</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fraction uncoloured = $\frac{4}{12} = \frac{1}{3}$

$\frac{1}{3}$ of the paper was left uncoloured.

Question 2

<table>
<thead>
<tr>
<th>sold</th>
<th>gave</th>
<th>left</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fraction of the number of cakes left = $\frac{6}{24} = \frac{1}{4}$

$\frac{1}{4}$ of the sponge cakes was left.

Question 3

1 day = 3
7 days = $3 \times 7 = 21$

Fraction = $\frac{21}{30} = \frac{7}{10}$

She sewed $\frac{7}{10}$ of the total number of dresses.

Question 4

<table>
<thead>
<tr>
<th>$250$</th>
<th>$100$</th>
<th>$50$</th>
</tr>
</thead>
<tbody>
<tr>
<td>father</td>
<td>mother</td>
<td>grandmother</td>
</tr>
</tbody>
</table>

250 + 100 + 50 = 400

James received $400

Fraction = $\frac{100}{400} = \frac{1}{4}$

$\frac{1}{4}$ of James’ total collection was from his mother.

Question 5

<table>
<thead>
<tr>
<th>Abel</th>
<th>$12$</th>
<th>$12$</th>
<th>$12$</th>
<th>$48$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ben</td>
<td>$20$</td>
<td>$20$</td>
<td>$20$</td>
<td>?</td>
</tr>
<tr>
<td>Carol</td>
<td>$?</td>
<td>$?</td>
<td>$?</td>
<td>?</td>
</tr>
</tbody>
</table>

48 – 12 – 20 = 16

Carol paid $16.

Fraction = $\frac{16}{48} = \frac{1}{3}$

Carol paid $\frac{1}{3}$ of the cost of the present.

Question 6

Day 1

<table>
<thead>
<tr>
<th>15</th>
</tr>
</thead>
</table>

Day 2

<table>
<thead>
<tr>
<th>15</th>
<th>15</th>
</tr>
</thead>
</table>

Day 3

| ?  |

15 x 2 = 30
30 cans were collected on Day 2.
55 – 45 = 10
10 cans were collected on Day 3.

Fraction = $\frac{10}{55} = \frac{2}{11}$

$\frac{2}{11}$ of the number of cans was left to be collect on Day 3.

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Let’s Get Started 10.3

2.

\[
\frac{3}{5} = \frac{6}{10} = \frac{12}{20}
\]

3.

\[
\frac{1}{4} = \frac{3}{12}
\]

4.

\[
\frac{1}{3} = \frac{3}{9}
\]

\[
\frac{1}{3} = \frac{4}{12}
\]

Ask Yourself

1. The whole / entire cake can be represented by \(\frac{4}{4}\) or simply 1.

2. By first converting the fractions into equivalent fractions with the same denominator.

Think Further

Cake eaten by father = \(\frac{2}{5}\)

\[
\frac{2}{10} - \frac{2}{5} = \frac{7}{10} - \frac{4}{10}
\]

\[
= \frac{3}{10}
\]

\(\frac{3}{10}\) of the cake remained.

Let’s Practise 10.3

Question 1

\[
1 - \frac{1}{4} - \frac{2}{3} = 1 - \frac{3}{4}
\]

\[
= \frac{1}{4}
\]

He will collect \(\frac{1}{4}\) of the laundry the following day.

Question 2

\[
1 - \frac{1}{6} - \frac{2}{6} = \frac{3}{6}
\]

\[
= \frac{1}{2}
\]

Cathy was left with \(\frac{1}{2}\) of her allowance.

Question 3

\[
1 - \frac{1}{10} - \frac{4}{10} = 1 - \frac{7}{10}
\]

\[
= \frac{3}{10}
\]

Mrs Hayma had \(\frac{3}{10}\) of the cookies left.

Question 4

\[
\frac{1}{5} + \frac{6}{8} = \frac{7}{8}
\]

Mrs Sim used \(\frac{7}{8}\) m of the fabric altogether.

Question 5

\[
\frac{1}{8} + \frac{3}{8} = \frac{4}{8}
\]

\[
= \frac{1}{2}
\]

The total mass of the two items is \(\frac{1}{2}\) kg.

Question 6

\[
\frac{6}{9} - \frac{2}{9} = \frac{4}{9}
\]

\(\frac{1}{3}\) t of the lilac paint was left.

Question 7

\[
\frac{3}{12} - \frac{1}{8} = \frac{3}{12} - \frac{2}{12}
\]

\[
= \frac{1}{12}
\]

Wendy had an extra \(\frac{1}{12}\) kg of cotton.

For more review questions, please visit www.onsponge.com
Question 8

Let's Get Started 11

1. $3u = 12$
   $1u = 12 \div 3$
   $= 4$
   $8u = 8 \times 4$
   $= 32$
There were 32 beads in the box.

2. Ask Yourself
   1. The parallel lines are likely to be found in on the opposite sides in the figure.
   2. There are no perpendicular lines in the figure.

Let's Practise 11

Question 1

Let’s Get Started 11

2u = 48
$1u = 48 \div 2$
$= 24$
$3u = 3 \times 24$
$= 72$
There are 72 Canadian stamps.

Question 9

Let’s Get Started 11

2u = 48
$1u = 48 \div 2$
$= 24$
$3u = 3 \times 24$
$= 72$
There are 72 Canadian stamps.

Question 10

(a) $\frac{1}{4} + \frac{7}{12} = \frac{3}{12} + \frac{7}{12}$
$= \frac{10}{12}$
$\frac{10}{12}$ of the flowers were lilies and roses.
$1 - \frac{10}{12} = \frac{2}{12}$
$= \frac{1}{6}$
$\frac{1}{6}$ of the flowers are daisies.

(b) 5u = 35
$1u = 35 \div 5$
$= 7$
$7u = 7 \times 7$
$= 49$
There are 49 stalks of roses.

Answers to Chapter 11 – Geometry

Let's Get Started 11

1. 

2. 

Ask Yourself
   1. The parallel lines are likely to be found in on the opposite sides in the figure.
   2. There are no perpendicular lines in the figure.

Let's Practise 11

Question 1

Let’s Get Started 11

Question 2
Question 3
There are 7 right angles in the figure.

Question 4
There are 3 angles in the figure below that are smaller than a right angle.

Question 5
There are two pairs of parallel lines.
There are 3 pairs of perpendicular lines.
There are 5 angles in the figure

Question 6
There are 3 right angles in the figure below.

Answers to Chapter 12 – Area and Perimeter

Let’s Get Started 12

2. Perimeter = 8 cm + 5 cm + 8 cm + 5 cm
   = 26 cm
   Area = 8 cm × 5 cm
   = 40 cm²

3. Perimeter = 12 cm + 4 cm + 12 cm + 4 cm
   = 32 cm
   Area = 12 cm × 4 cm
   = 48 cm²

Ask Yourself
1. There are two ways.

Think Further
1. No. The method is still the same.
Let’s Practise 12

Question 1

[Diagram of a square with dimensions]

Perimeter = 10 + 15 + 10 + 15
= 50
Area Big Square = 10 × 10
= 100
Area Small Square = 5 × 5
= 25
Total Area = 100 + 25
= 125
The perimeter and area of the figure is 50 cm and 125 cm² respectively.

Question 2

10 + 8 + 5 + 12 + 15 = 50
The perimeter of the figure is 50 cm.

Question 3

10 + 5 + 4 + 7 + 12 + 15 = 53
The perimeter of the figure is 53 cm.

Question 4

Perimeter 1 rectangle = 6 + 3 + 6 + 3
= 18
Perimeter of 2 rectangles = 18 + 18
= 36
Perimeter of 3 stacked rectangles = 6 + 9 + 9 + 6
= 30
Total perimeter = 36 + 30
= 66
The perimeter of the figure is 66 cm.

Question 5

Area of Square A = 5 × 5
= 25
Area of Rectangle B = 8 × 4
= 32
Total area of figure = 25 + 32
= 57
The area of the figure is 57 cm².

Question 6

Breadth of Square A = 10 cm
Area of Square A = 10 × 10
= 100
Length of Rectangle B = 10 × 2
= 20
Area of Rectangle B = 20 × 10
= 200
100 + 200 = 300
The area of the figure is 300 cm².

Question 7

Area of Rectangle B = 12 × 5
= 60
Area of Rectangle A = 60 ÷ 2
= 30
The area of Rectangle A is 30 cm².

Question 8

2 m = 200 cm
Length of fence = 200 + 50 + 200 + 50
= 500
She needed 500 cm of fence.

Question 9

Area of cloth = 90 × 10
= 900
Area of 1 square = 10 × 10
= 100
Area of 4 squares = 4 × 100
= 400
900 – 400 = 500
The area of cloth that remained was 500 cm².

Question 10

Area of bedroom = 12 × 4
= 48
48 – 12 = 36
36 m² of the bedroom was not covered.
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