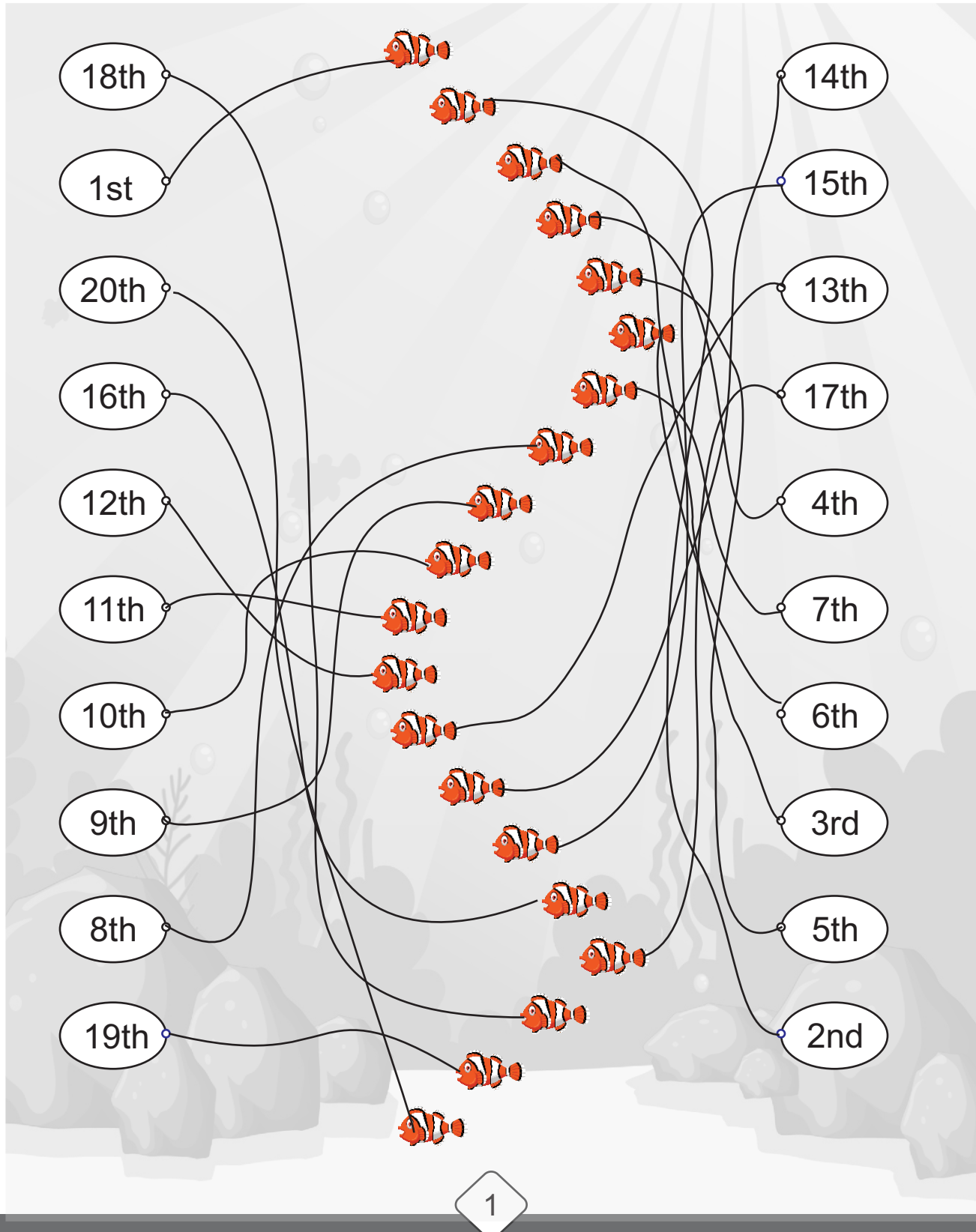


Unit 1: Whole Numbers

Learning Check 1.1

Match the position of the fish with their correct ordinal numbers.



Learning Check 1.2

1. Write the number names for the given numbers.

32 Thirty-two

45 Forty-five

69 Sixty-nine

71 Seventy-one

84 Eighty-four

98 Ninety-eight

2. Write the following in numerals.

Seventy-nine 79

Eighty-two 82

Ninety-one 91

Sixteen 16

Fifty-six 56

Thirty-eight 38

3. Colour the correct numbers by using the given colour key.

63 Yellow

74 Red

100 Pink

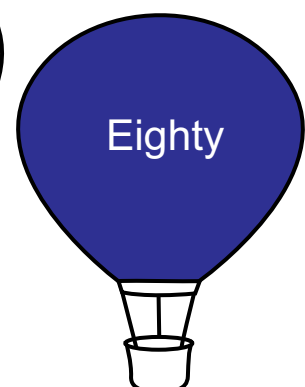
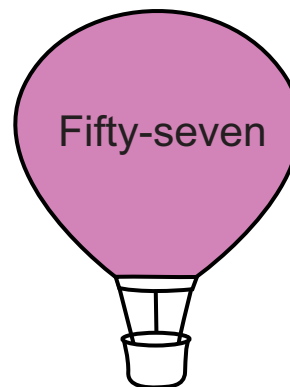
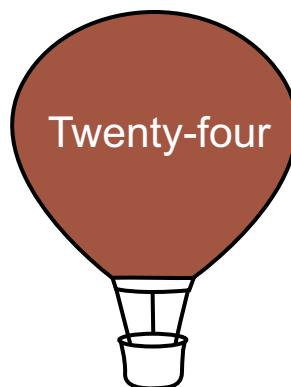
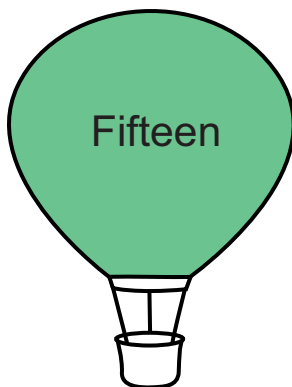
15 Green

80 Blue

57 Purple

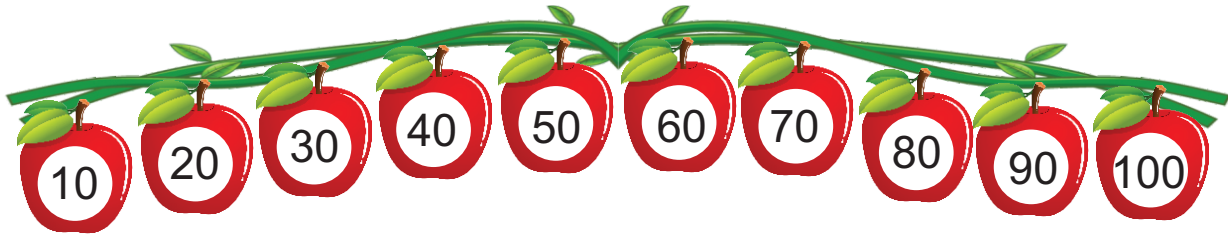
99 Orange

24 Brown

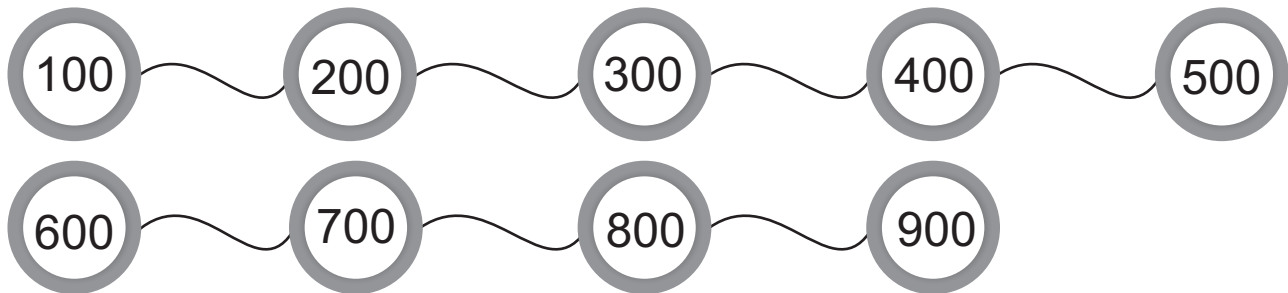


Learning Check 1.3

1. Count in tens and write the missing numbers.



2. Count in hundreds and write the missing numbers.



3. Write the numbers for the following number names.

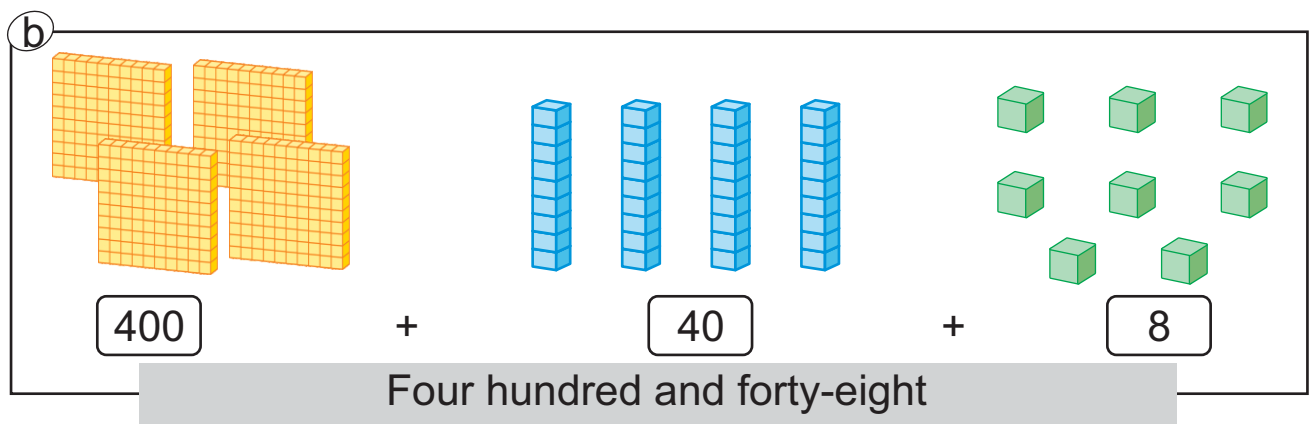
- a Three hundred and fifty-nine. 359
- b Five hundred and twenty. 520
- c Seven hundred and sixty-two. 762
- d Nine hundred and eleven. 911
- e Four hundred and forty-four. 444

4. Write the number shown by these blocks.

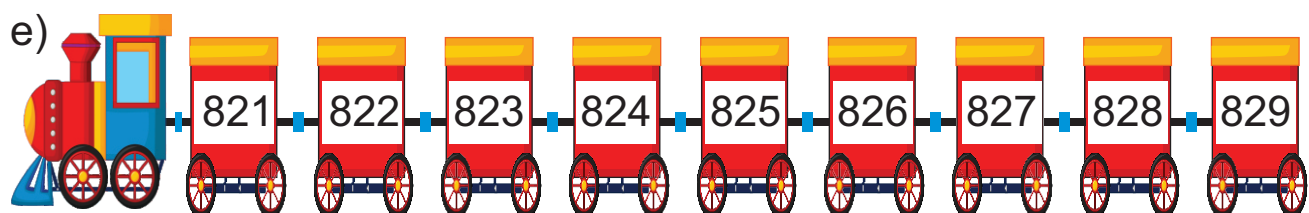
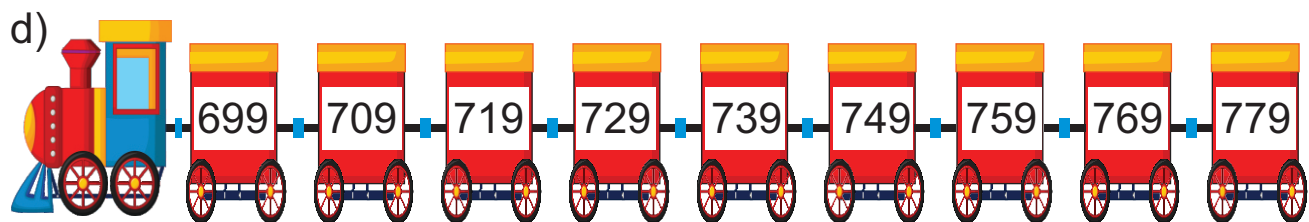
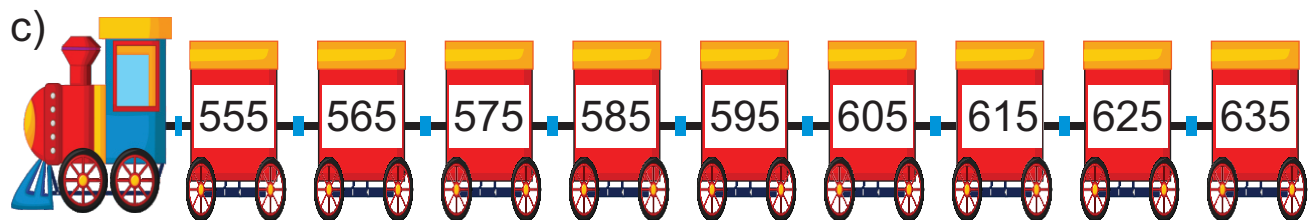
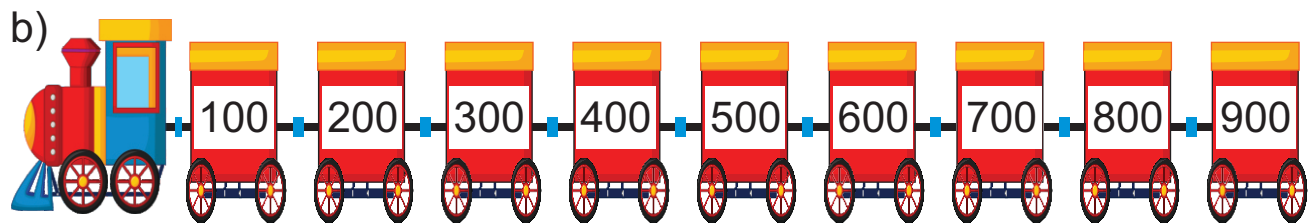
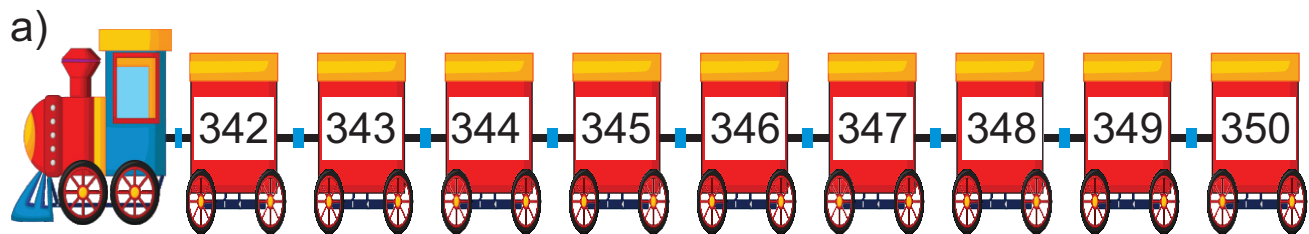
a

300 + 60 + 6

Three hundred and sixty-six

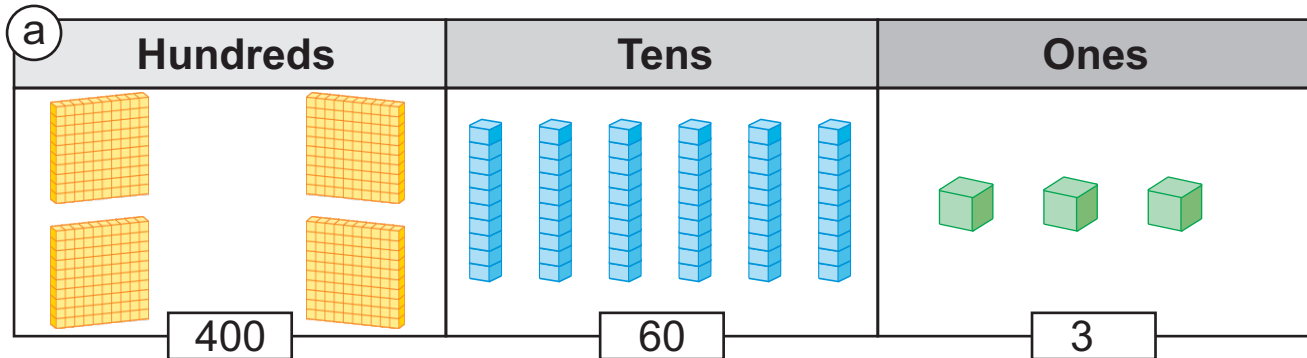


5. Write the missing numbers.



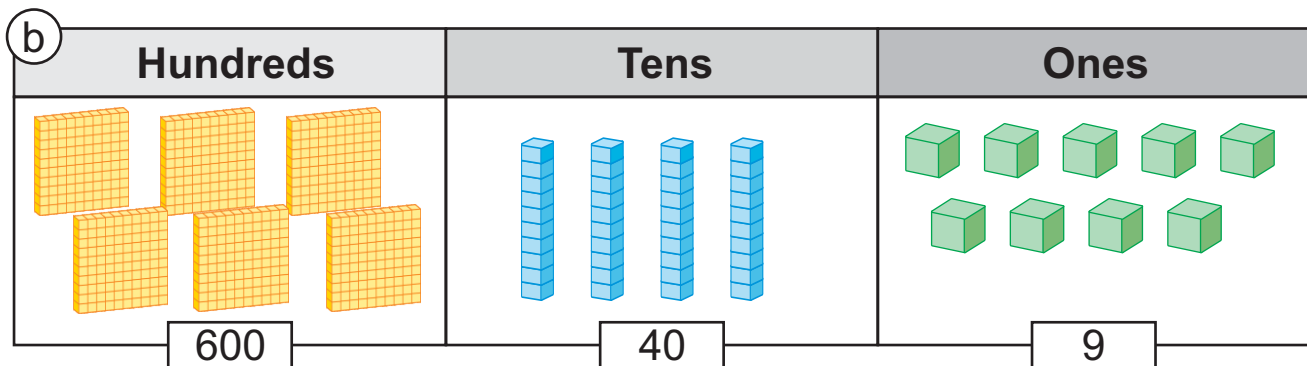
Learning Check 1.4

- Count and write the hundreds, tens and ones. Then write the expanded form and the standard form of the number.



Expanded Form: $400 + 60 + 3$

Standard Form: 463



Expanded Form: $600 + 40 + 9$

Standard Form: 649

- Write the place value and value of the coloured digits.

Numbers	Place Value	Value
456	10	$5 \times 10 = 50$
901	1	$1 \times 1 = 1$
630	100	$6 \times 100 = 600$
375	10	$7 \times 10 = 70$
227	100	$2 \times 100 = 200$

Learning Check 1.5

1. Compare and tick (✓) the greater number in each of these.

a) $\begin{array}{|c|c|} \hline 524 & 89 \\ \hline \end{array}$
☒ ☐

b) $\begin{array}{|c|c|} \hline 65 & 943 \\ \hline \end{array}$
☐ ☒

c) $\begin{array}{|c|c|} \hline 234 & 231 \\ \hline \end{array}$
☒ ☐

d) $\begin{array}{|c|c|} \hline 724 & 780 \\ \hline \end{array}$
☐ ☒

e) $\begin{array}{|c|c|} \hline 121 & 112 \\ \hline \end{array}$
☒ ☐

f) $\begin{array}{|c|c|} \hline 882 & 880 \\ \hline \end{array}$
☒ ☐

2. Circle the smallest number and cross out (×) the greatest number in each of the following.

a) $\begin{array}{|c|c|c|} \hline \cancel{680} & (649) & 652 \\ \hline \end{array}$

b) $\begin{array}{|c|c|c|} \hline (423) & \cancel{429} & 424 \\ \hline \end{array}$

c) $\begin{array}{|c|c|c|} \hline 845 & \cancel{988} & (299) \\ \hline \end{array}$

d) $\begin{array}{|c|c|c|} \hline 724 & (188) & \cancel{752} \\ \hline \end{array}$

e) $\begin{array}{|c|c|c|} \hline \cancel{112} & 109 & (100) \\ \hline \end{array}$

f) $\begin{array}{|c|c|c|} \hline 652 & (650) & \cancel{656} \\ \hline \end{array}$

g) $\begin{array}{|c|c|c|} \hline (819) & \cancel{801} & 881 \\ \hline \end{array}$

h) $\begin{array}{|c|c|c|} \hline 370 & (369) & \cancel{381} \\ \hline \end{array}$

3. Arrange these numbers in ascending order.

a) $\begin{array}{ccc} 562 & 672 & 542 \\ & 566 & 555 \end{array}$

$\begin{array}{|c|c|c|c|c|} \hline (542) & (555) & (562) & (566) & (672) \\ \hline \end{array}$

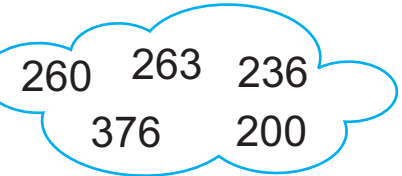
b) $\begin{array}{ccc} 782 & 656 & 660 \\ & 162 & 126 \end{array}$

$\begin{array}{|c|c|c|c|c|} \hline (126) & (162) & (565) & (660) & (782) \\ \hline \end{array}$

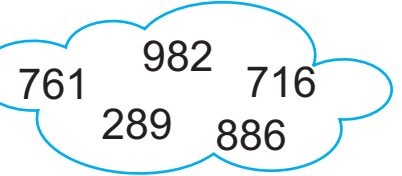
c) $\begin{array}{ccc} 923 & 452 & 401 \\ & 672 & 627 \end{array}$

$\begin{array}{|c|c|c|c|c|} \hline (401) & (452) & (627) & (672) & (923) \\ \hline \end{array}$

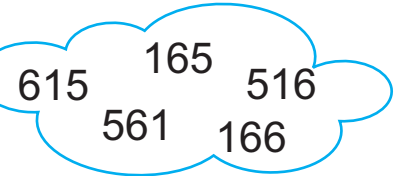
4. Arrange these numbers in descending order.

a)  260 263 236
376 200

376 263 260 236 200

b)  761 982 716
289 886

982 886 761 716 289

c)  615 165 516
561 166

615 561 516 166 165

Learning Check 1.6

1. Count 10 steps backwards in ones.

a) 203 202 201 200 199 198 197 196 195 194

b) 567 566 565 564 563 562 561 560 559 558

2. Count 10 steps backwards in tens.

a) 654 644 634 624 614 604 594 584 574 564

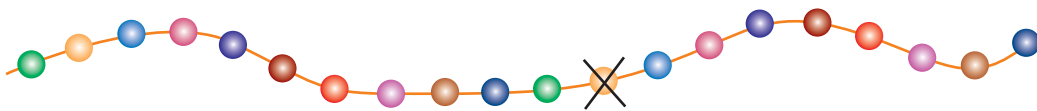
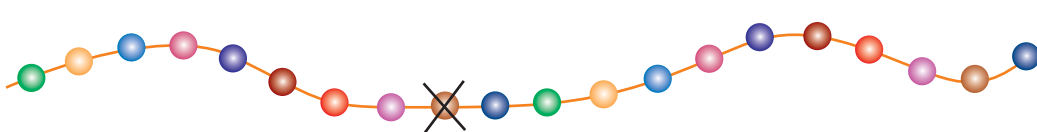
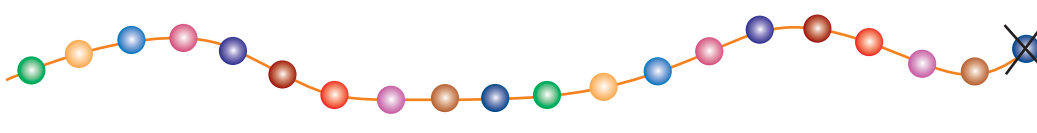
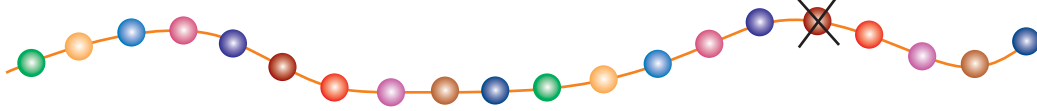
b) 320 310 300 290 280 270 260 250 240 230

Unit Check 1

1. Encircle the correct options.

- a) Ordinal numbers show the _____ of a number.
i) value **ii) position** iii) addition iv) sum
- b) 76 written in words:
i) seventy-five ii) seventy
iii) seventy-eight **iv) seventy-six**
- c) The place of 7 in 476:
i) ones **ii) tens** iii) hundreds iv) thousands
- d) When comparing two or more 3-digit numbers, always start comparing from the _____ place.
i) hundreds ii) tens
iii) ones iv) thousands
- e) 1 more than 999:
i) 100 ii) 9991 **iii) 1000** iv) 1001

2. Cross out (×) the correct beads (from left to right).

- a) **12th** 
- b) **9th** 
- c) **20th** 
- d) **16th** 

3. Write the following numbers in words.

51	Fifty-one	82	Eighty-two	66	Sixty-six
47	Forty-seven	15	Fifteen	51	Fifty-one
99	Ninety-one	40	Forty		

4. Count and write the missing numbers.

a) 432 433 434 435 436 437 438

b) 808 809 810 811 812 813 814

5. Write the following numbers in numerals.

a) Two hundred and fifty-five 255

b) Four hundred 400

c) Seven hundred and eighty-three 783

d) Three hundred and seventy-one 371

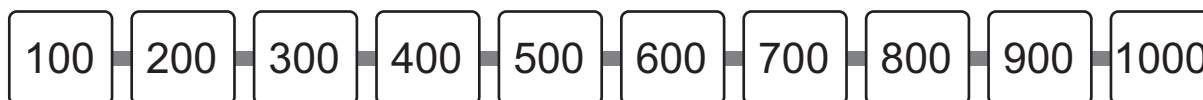
e) Six hundred and seven 607

f) Nine hundred and eighty 980

6. Count in 10s and write the missing numbers.

10	20	30	40	50	60	70	80	90	100
----	----	----	----	----	----	----	----	----	-----

7. Count in 100s and write the missing numbers.



8. Write the place, place value and value of the underlined digits.

- a) 723 Place: tens Place Value: 10 Value: $2 \times 10 = 20$
b) 672 Place: hundreds Place Value: 100 Value: $6 \times 100 = 600$
c) 890 Place: tens Place Value: 10 Value: $9 \times 10 = 90$
d) 521 Place: ones Place Value: 1 Value: $1 \times 1 = 1$
e) 407 Place: tens Place Value: 10 Value: $0 \times 10 = 00$

9. Compare the numbers and write “greater than”, “smaller than” or “equal to” in the boxes.

- a) 52 is smaller than 123. b) 634 is greater than 630.
c) 902 is greater than 899. d) 567 is equal to 567.

10. Write the smallest and the greatest number in each of the following.

Numbers	Smallest	Greatest
a) 101, 211, 210, 121, 111	101	211
b) 925, 952, 908, 902, 980	902	980
c) 622, 672, 627, 602, 660	602	672
d) 335, 345, 330, 305, 341	305	345

11. Write the following numbers in ascending order.

- a) 706, 789, 760, 798, 786 b) 532, 540, 538, 536, 555
706, 760, 786, 789, 798 532, 536, 538, 540, 555

12. Write the following numbers in descending order.

- a) 623, 899, 863, 276, 736 b) 402, 410, 487, 199, 469
899, 863, 736, 623, 276 487, 469, 410, 402, 199

13. Count 10 steps backwards in ones.

a) 606 — 605 — 604 — 603 — 602 — 601 — 600 — 599 — 598 — 597

b) 321 — 320 — 319 — 318 — 317 — 316 — 315 — 314 — 313 — 312

14. Count 10 steps backwards in tens.

a) 789 — 779 — 769 — 759 — 749 — 739 — 729 — 719 — 709 — 699

b) 443 — 433 — 423 — 413 — 403 — 393 — 383 — 373 — 363 — 353

Unit 2: Number Operations

i) Addition

Learning Check 2.1

Add the following.

a) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} \quad 5 \\ + \quad 2 \\ \hline 7 \end{array}$	b) $\begin{array}{r} \text{T} \quad \text{O} \\ \quad 6 \\ + \quad 3 \\ \hline 9 \end{array}$	c) $\begin{array}{r} \text{T} \quad \text{O} \\ \quad 9 \\ + \quad 0 \\ \hline 9 \end{array}$	d) $\begin{array}{r} \text{T} \quad \text{O} \\ \quad 4 \\ + \quad 3 \\ \hline 7 \end{array}$	e) $\begin{array}{r} \text{T} \quad \text{O} \\ \quad 8 \\ + \quad 1 \\ \hline 9 \end{array}$
f) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} \quad 6 \\ + \quad 9 \\ \hline 1 \quad 5 \end{array}$	g) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} \quad 8 \\ + \quad 8 \\ \hline 1 \quad 6 \end{array}$	h) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} \quad 9 \\ + \quad 3 \\ \hline 1 \quad 2 \end{array}$	i) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} \quad 4 \\ + \quad 7 \\ \hline 1 \quad 1 \end{array}$	j) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} \quad 9 \\ + \quad 9 \\ \hline 1 \quad 8 \end{array}$

Learning Check 2.2

1. Add the following.

a) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 2 \quad 6 \\ + \quad 7 \\ \hline 3 \quad 3 \end{array}$	b) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 6 \quad 5 \\ + \quad 8 \\ \hline 7 \quad 3 \end{array}$	c) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 4 \quad 7 \\ + \quad 6 \\ \hline 5 \quad 3 \end{array}$	d) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 1 \quad 4 \\ + \quad 9 \\ \hline 2 \quad 3 \end{array}$	e) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 4 \quad 6 \\ + \quad 5 \\ \hline 5 \quad 1 \end{array}$
f) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 4 \quad 5 \\ + \quad 5 \\ \hline 5 \quad 0 \end{array}$	g) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 5 \quad 6 \\ + \quad 6 \\ \hline 6 \quad 2 \end{array}$	h) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 7 \quad 7 \\ + \quad 4 \\ \hline 8 \quad 1 \end{array}$	i) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 8 \quad 2 \\ + \quad 9 \\ \hline 9 \quad 1 \end{array}$	j) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 7 \quad 3 \\ + \quad 8 \\ \hline 8 \quad 1 \end{array}$
k) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 5 \quad 2 \\ + 2 \quad 9 \\ \hline 8 \quad 1 \end{array}$	l) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 3 \quad 5 \\ + 4 \quad 5 \\ \hline 8 \quad 0 \end{array}$	m) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 1 \quad 6 \\ + 5 \quad 8 \\ \hline 7 \quad 4 \end{array}$	n) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 1 \quad 2 \\ + 7 \quad 8 \\ \hline 9 \quad 0 \end{array}$	o) $\begin{array}{r} \text{T} \quad \text{O} \\ \textcircled{1} 6 \quad 6 \\ + 1 \quad 7 \\ \hline 8 \quad 3 \end{array}$

p)

T	O
5	7
+ 1	8
7	5

 q)

T	O
① 3	7
+ 2	7
6	4

 r)

T	O
① 5	5
+ 2	8
8	3

 s)

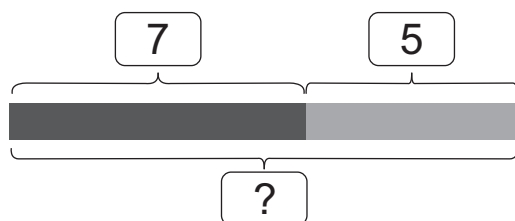
T	O
① 3	6
+ 2	7
6	3

 t)

T	O
① 4	7
+ 2	5
7	2

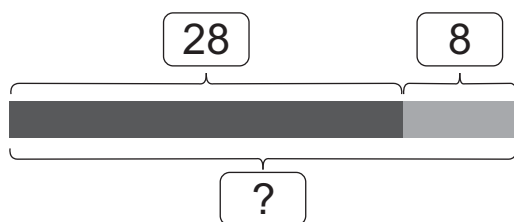
2. Parveen made 7 drawings and her brother Ibrahim made 5 drawings. Find the total number of drawings they made altogether.

Let's use a part-whole model (also called the bar model) to solve the word problem. We will place two bars adjacent to each other that show the quantities given "in parts". Here 7 and 5 are the parts which add up to make the required whole.



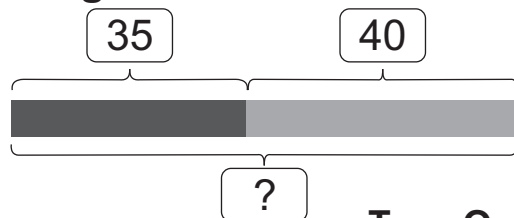
		T	O
Drawing made by Parveen	=	0	7
Drawing made by Ibrahim	= +		5
Total drawings	=	1	2

3. Nadeem weighs 8 kg more than his brother Aleem. If Aleem weighs 28 kg, find the weight of Nadeem.



Aleem weighs	=	T	O
		① 2	8
How much more Nadeem weighs	= +		8
Nadeem weighs	=	3	6

4. In a test, Nida got 35 marks in Science and 40 marks in Mathematics. How many marks did she get in Science and Mathematics altogether?



Marks in Science

=

T	O
3	5

Marks in Mathematics

= +

T	O
4	0

Total marks

=

T	O
7	5

Learning Check 2.3

1. Add the following.

a)

H	T	O
6	6	1
+		6
6	6	7

b)

H	T	O
7	3	2
+		5
7	3	7

c)

H	T	O
6	6	5
+		3
6	6	8

d)

H	T	O
5	5	4
+		5
5	5	9

e)

H	T	O
6	3	3
+		6
6	3	9

f)

H	T	O
8	6	3
+		4
8	6	7

g)

H	T	O
7	7	2
+		3
7	7	5

h)

H	T	O
4	6	5
+		3
4	6	8

i)

H	T	O
3	3	1
+	3	3
3	6	4

j)

H	T	O
2	2	1
+	4	4
2	6	5

k)

H	T	O
8	3	4
+	6	2
8	9	6

l)

H	T	O
4	4	2
+	2	4
4	6	6

m)

H	T	O
8	2	2
+	5	3
8	7	5

n)

H	T	O
3	3	2
+	2	2
3	5	4

o)

H	T	O
7	2	1
+	5	2
7	7	3

p)

H	T	O
2	3	1
+	6	2
2	9	3

q)

H	T	O
1	7	4
+ 6	1	1
7	8	5

r)

H	T	O
1	1	4
+ 3	5	3
4	6	7

s)

H	T	O
8	2	3
+ 1	0	3
9	2	6

t)

H	T	O
7	4	0
+ 1	1	6
8	5	6

u)

H	T	O
1	1	1
+ 2	3	1
3	4	2

v)

H	T	O
1	7	2
+ 3	2	2
4	9	4

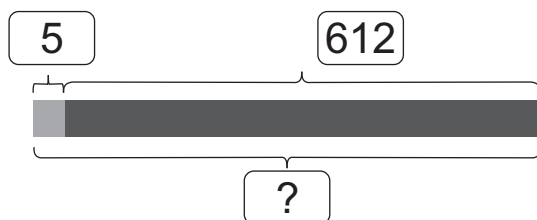
w)

H	T	O
7	1	4
+ 1	3	1
8	4	5

x)

H	T	O
5	1	4
+ 1	4	1
6	5	5

2. Marwa collected 612 coins. Her brother gave her 5 more coins. Find the total number of coins she has?



Coins Marwa collected

=

H	T	O
6	1	2

Coins given by brother

= +

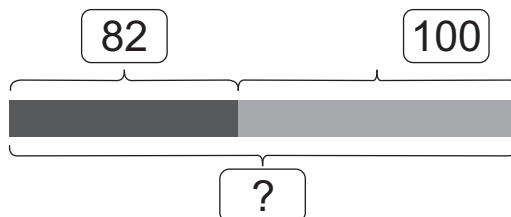
		5
--	--	---

Total number of coins

=

H	T	O
6	1	7

3. While going on a school field trip, there are 82 students in one bus and 100 students in another bus. How many students are there altogether?



Number of students in one bus

=

H	T	O
	8	2

Number of students in another bus

= +

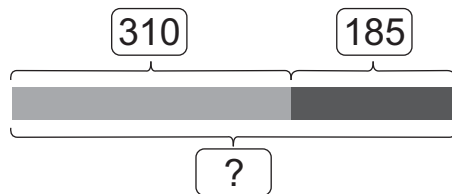
1	0	0
---	---	---

Total number of students

=

1	8	2
---	---	---

4. Iqbal bought a set of blocks for Rs 310 and a pack of stamps for Rs 185. How much did he spend altogether?



		H	T	O	
Price of set of blocks	=	Rs	3	1	0
Price of pack of stamps	= +	Rs	1	8	5
Money spent altogether	=	Rs	4	9	5

Learning Check 2.4

1. Add the following.

a)

H	T	O
2	①5	7
+		8
2	6	5

b)

H	T	O
7	①3	4
+		6
7	4	0

c)

H	T	O
3	①4	9
+		2
3	5	1

d)

H	T	O
3	①5	5
+		5
3	6	0

e)

H	T	O
3	①7	6
+		5
3	8	1

f)

H	T	O
①4	①9	8
+		3
5	0	1

g)

H	T	O
2	①8	4
+		9
2	9	3

h)

H	T	O
7	①6	3
+		8
7	7	1

i)

H	T	O
3	①3	9
+	3	3
3	7	2

j)

H	T	O
2	①2	7
+	4	4
2	7	1

k)

H	T	O
①3	①3	4
+	6	6
4	0	0

l)

H	T	O
①4	①4	2
+	9	8
5	4	0

m)

H	T	O
①3	①4	9
+	5	8
4	0	7

n)

H	T	O
3	①3	7
+	2	6
3	6	3

o)

H	T	O
①2	①6	9
+	5	2
3	2	1

p)

H	T	O
①2	①7	9
+	6	2
3	4	1

q)

H	T	O
1	①0	8
+	5	4
2	6	2

r)

H	T	O
①2	①9	7
+	0	4
5	0	1

s)

H	T	O
4	①2	8
+	5	5
8	8	3

t)

H	T	O
①1	9	4
+	5	5
8	4	9

u)

H	T	O
①3	9	4
+	2	0
9	1	4

v)

H	T	O
①1	①9	8
+	8	2
7	8	0

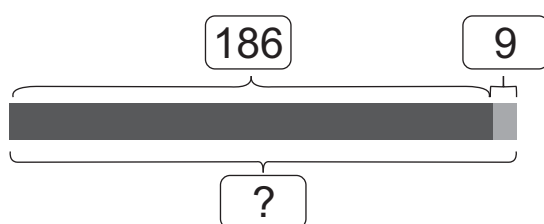
w)

H	T	O
①1	4	5
+	8	3
8	2	8

x)

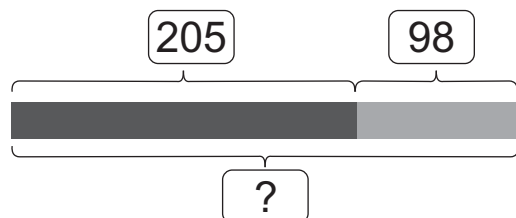
H	T	O
①4	①4	2
+	6	9
6	1	1

2. In a tree planting campaign, the students of grade 2 planted 186 trees on Sunday. They planted 9 more trees on Monday. How many trees were planted during these two days?



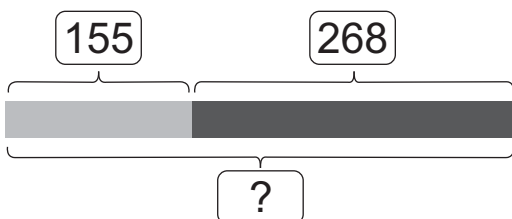
Number of trees planted on Sunday	=	<table border="1"> <thead> <tr> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>①8</td> <td>6</td> </tr> </tbody> </table>	H	T	O	1	①8	6
H	T	O						
1	①8	6						
Number of trees planted on Monday	= +	<table border="1"> <tbody> <tr> <td></td> <td></td> <td>9</td> </tr> </tbody> </table>			9			
		9						
Total number of trees planted	=	<table border="1"> <tbody> <tr> <td>1</td> <td>9</td> <td>5</td> </tr> </tbody> </table>	1	9	5			
1	9	5						

3. A baker baked 205 cookies in the morning and 98 cookies in the evening. How many cookies did he bake altogether?



	H	T	O
Number of cookies baked in the morning =	① 2	① 0	5
Number of cookies baked in the evening = +		9	8
Total number of cookies baked =	3	0	3

4. There are 155 black chairs and 268 brown chairs in an office. Find the total number of chairs in the office.



	H	T	O
Number of black chairs =	① 1	① 5	5
Number of brown chairs = +	2	6	8
Total number of chairs =	4	2	3

Unit Check Addition

1. Encircle the correct options.

a) The sum of 9 and 8 is _____.

i) 15

ii) 16

③ iii) 17

iv) 18

b) Always add ones to _____.

i) tens

③ ii) ones

iii) hundreds

iv) twos

c) $56 + 56 =$ _____.

③ i) 112

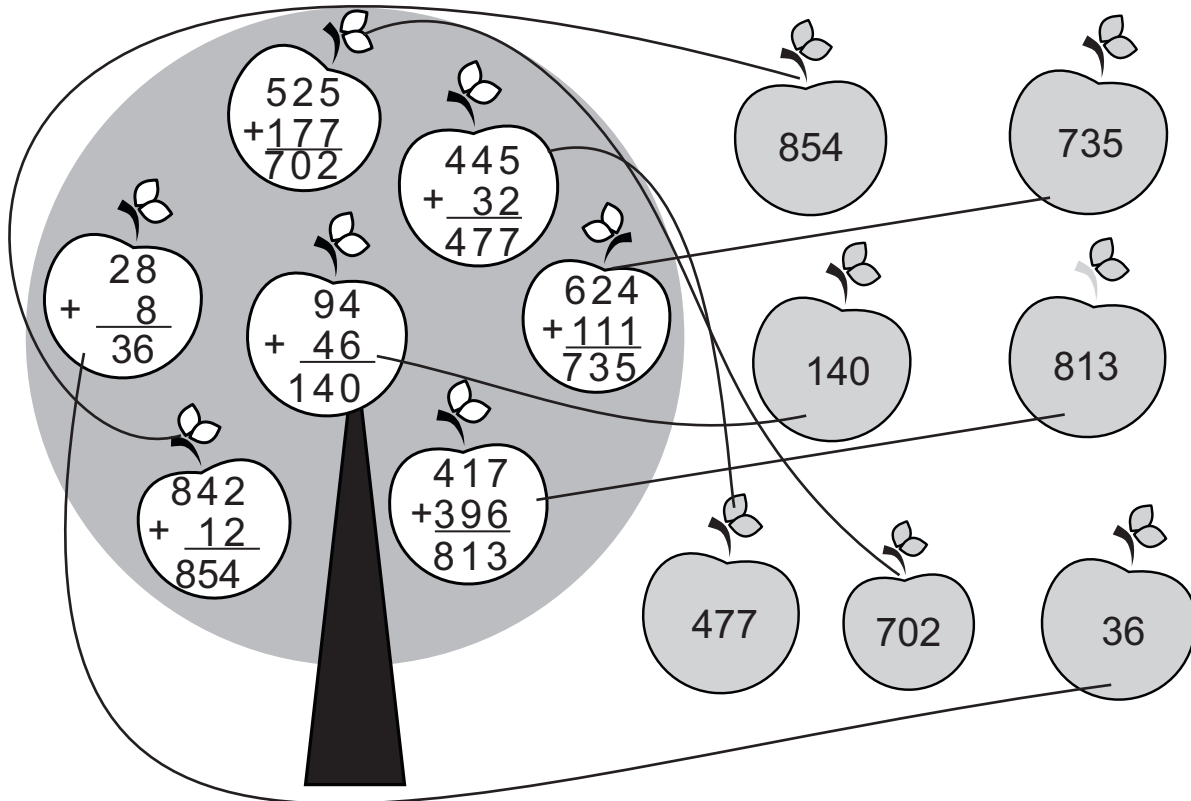
ii) 121

iii) 212

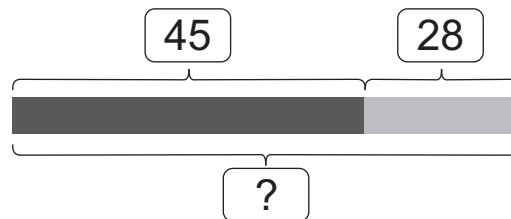
iv) 122

- d) When adding, start from _____.
 i) tens **ii) ones** iii) hundreds iv) thousands
- e) Which of the following has a sum equal to 914?
 i) $585 + 439$ ii) $427 + 667$ iii) $858 + 536$ **iv) $558 + 356$**

2. Solve and then match with the correct answer.

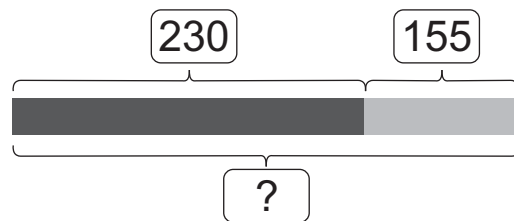


- 3. Sehrish bought a packet of hairclips containing 45 hairclips. She already had 28 hairclips. How many hairclips does she have now?**



		H	T	O
Number of hairclips in the pack	=		^① 4	5
Number of hairclips she already had	= +		2	8
Total number of hairclips	=		7	3

4. There are 230 crayons in one pack and 155 crayons in another pack. How many crayons are there altogether?



Number of crayons in one pack

=

H	T	O
2	3	0

Number of crayons in other pack

= +

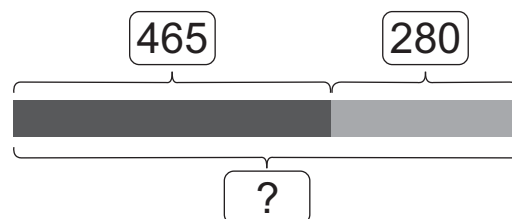
1	5	5
---	---	---

Total number of crayons

=

3	8	5
---	---	---

5. A smaller box of paper clips has 465 paper clips. A bigger box contains 280 more paper clips than the smaller box. How many paper clips are in the bigger box?



Number of paper clips in smaller box

=

H	T	O
① 4	6	5

More paper clips in bigger box

= +

2	8	0
---	---	---

Number of paper clips in bigger box

=

7	4	5
---	---	---

ii) Subtraction

Learning Check 2.5

1. Subtract the following.

a)

T	O
⁸ 9	^① 1
—	4
8	7

b)

T	O
⁷ 8	^① 0
—	3
7	7

c)

T	O
² 3	^① 0
—	6
2	4

d)

T	O
¹ 2	^① 3
—	6
1	7

e)

T	O
⁵ 6	^① 6
—	7
5	9

f)

T	O
⁴ 5	^① 2
—	3
4	9

g)

T	O
² 3	^① 4
—	5
2	9

h)

T	O
⁰ 1	^① 5
—	7
0	8

i)

T	O
⁴ 5	^① 6
— 4	9
0	7

j)

T	O
³ 4	^① 4
— 3	7
0	7

k)

T	O
⁶ 7	^① 8
— 2	9
4	9

l)

T	O
² 3	^① 6
— 1	8
1	8

m)

T	O
⁶ 7	^① 5
— 2	8
4	7

n)

T	O
² 3	^① 4
— 1	7
1	7

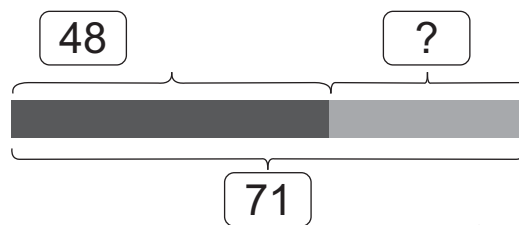
o)

T	O
⁷ 8	^① 2
— 1	6
6	6

p)

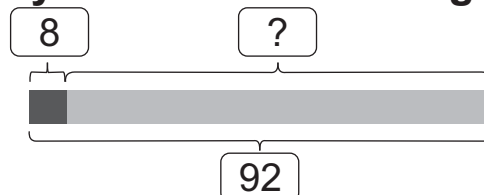
T	O
⁷ 8	^① 3
— 4	9
3	4

2. A book has 71 pages. Salma read 48 pages. How many pages are left to read?



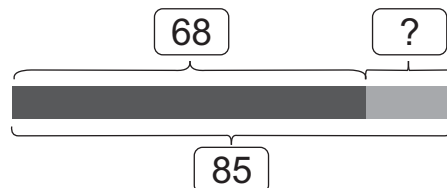
		T	O		
Total number of pages	=	<table border="1"><tr><td>⁶7</td><td>¹1</td></tr></table>	⁶ 7	¹ 1	
⁶ 7	¹ 1				
Number of pages read	= -	<table border="1"><tr><td>4</td><td>8</td></tr></table>	4	8	
4	8				
Number of pages left	=	<table border="1"><tr><td>2</td><td>3</td></tr></table>	2	3	
2	3				

3. In a test, Sehrish got 8 marks less than Nida. If Nida got 92 marks, how many marks did Sehrish get?



		T	O		
Nida's marks	=	<table border="1"><tr><td>⁸9</td><td>¹2</td></tr></table>	⁸ 9	¹ 2	
⁸ 9	¹ 2				
Marks less than Nida	= -	<table border="1"><tr><td></td><td>8</td></tr></table>		8	
	8				
Sehrish's marks	=	<table border="1"><tr><td>8</td><td>4</td></tr></table>	8	4	
8	4				

4. Ahad saved Rs 85 from his pocket money. He spent Rs 68 to buy some sweets for needy kids. How much money does he has left?



		T	O		
Total amount saved	=	<table border="1"><tr><td>⁷8</td><td>¹5</td></tr></table>	⁷ 8	¹ 5	
⁷ 8	¹ 5				
Amount spent	= -	<table border="1"><tr><td>6</td><td>8</td></tr></table>	6	8	
6	8				
Amount left	=	<table border="1"><tr><td>1</td><td>7</td></tr></table>	1	7	
1	7				

Learning Check 2.6

1. Subtract the following.

a)
$$\begin{array}{r} \text{H T O} \\ 536 \\ - \quad 2 \\ \hline 534 \end{array}$$

b)
$$\begin{array}{r} \text{H T O} \\ 163 \\ - \quad 1 \\ \hline 162 \end{array}$$

c)
$$\begin{array}{r} \text{H T O} \\ 784 \\ - \quad 4 \\ \hline 780 \end{array}$$

d)
$$\begin{array}{r} \text{H T O} \\ 557 \\ - \quad 6 \\ \hline 551 \end{array}$$

e)
$$\begin{array}{r} \text{H T O} \\ 888 \\ - \quad 8 \\ \hline 880 \end{array}$$

f)
$$\begin{array}{r} \text{H T O} \\ 359 \\ - \quad 5 \\ \hline 354 \end{array}$$

g)
$$\begin{array}{r} \text{H T O} \\ 424 \\ - \quad 2 \\ \hline 422 \end{array}$$

h)
$$\begin{array}{r} \text{H T O} \\ 374 \\ - \quad 1 \\ \hline 373 \end{array}$$

i)
$$\begin{array}{r} \text{H T O} \\ 478 \\ - 47 \\ \hline 431 \end{array}$$

j)
$$\begin{array}{r} \text{H T O} \\ 758 \\ - 31 \\ \hline 727 \end{array}$$

k)
$$\begin{array}{r} \text{H T O} \\ 189 \\ - 58 \\ \hline 131 \end{array}$$

l)
$$\begin{array}{r} \text{H T O} \\ 174 \\ - 20 \\ \hline 154 \end{array}$$

m)
$$\begin{array}{r} \text{H T O} \\ 165 \\ - 21 \\ \hline 144 \end{array}$$

n)
$$\begin{array}{r} \text{H T O} \\ 584 \\ - 13 \\ \hline 571 \end{array}$$

o)
$$\begin{array}{r} \text{H T O} \\ 654 \\ - 43 \\ \hline 611 \end{array}$$

p)
$$\begin{array}{r} \text{H T O} \\ 289 \\ - 34 \\ \hline 255 \end{array}$$

q)
$$\begin{array}{r} \text{H T O} \\ 747 \\ - 115 \\ \hline 632 \end{array}$$

r)
$$\begin{array}{r} \text{H T O} \\ 509 \\ - 301 \\ \hline 208 \end{array}$$

s)
$$\begin{array}{r} \text{H T O} \\ 773 \\ - 142 \\ \hline 631 \end{array}$$

t)
$$\begin{array}{r} \text{H T O} \\ 578 \\ - 427 \\ \hline 151 \end{array}$$

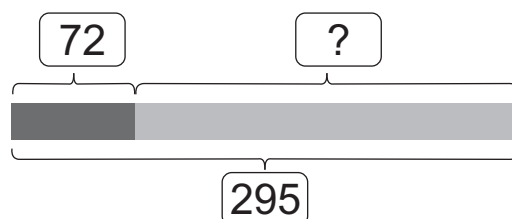
$$\begin{array}{r} \text{u)} \quad \begin{array}{|c|c|c|} \hline \text{H} & \text{T} & \text{O} \\ \hline 7 & 9 & 7 \\ -2 & 8 & 6 \\ \hline 5 & 1 & 1 \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} \text{v)} \quad \begin{array}{|c|c|c|} \hline \text{H} & \text{T} & \text{O} \\ \hline 9 & 5 & 9 \\ -8 & 3 & 6 \\ \hline 1 & 2 & 3 \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} \text{w)} \quad \begin{array}{|c|c|c|} \hline \text{H} & \text{T} & \text{O} \\ \hline 4 & 8 & 9 \\ -2 & 7 & 8 \\ \hline 2 & 1 & 1 \\ \hline \end{array} \end{array}$$

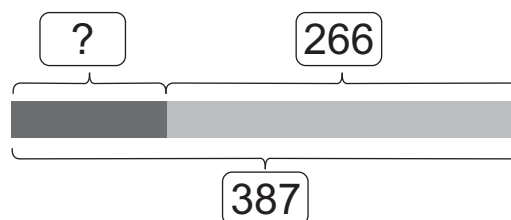
$$\begin{array}{r} \text{x)} \quad \begin{array}{|c|c|c|} \hline \text{H} & \text{T} & \text{O} \\ \hline 9 & 2 & 6 \\ -2 & 2 & 1 \\ \hline 7 & 0 & 5 \\ \hline \end{array} \end{array}$$

2. There are 295 eggs in a shop. 72 eggs are rotten. How many eggs are fresh?



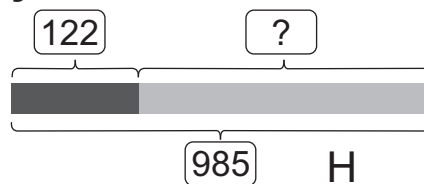
Total number of eggs	=	<table border="1"> <tr><td>H</td><td>T</td><td>O</td></tr> <tr><td>2</td><td>9</td><td>5</td></tr> </table>	H	T	O	2	9	5
H	T	O						
2	9	5						
Number of rotten eggs	= -	<table border="1"> <tr><td></td><td>7</td><td>2</td></tr> </table>		7	2			
	7	2						
Number of fresh eggs	=	<table border="1"> <tr><td>2</td><td>2</td><td>3</td></tr> </table>	2	2	3			
2	2	3						

3. In a crowd, there are 387 men and 266 women. What is the difference between the number of men and women?



Number of men	=	<table border="1"> <tr><td>H</td><td>T</td><td>O</td></tr> <tr><td>3</td><td>8</td><td>7</td></tr> </table>	H	T	O	3	8	7
H	T	O						
3	8	7						
Number of women	= -	<table border="1"> <tr><td>2</td><td>6</td><td>6</td></tr> </table>	2	6	6			
2	6	6						
Difference	=	<table border="1"> <tr><td>1</td><td>1</td><td>1</td></tr> </table>	1	1	1			
1	1	1						

4. A truck carries 985 bricks out of which 122 bricks are broken. How many bricks are unbroken?



Total number of bricks	=		H	T	O
			9	8	5
Number of broken bricks	= -		1	2	2
Number of unbroken bricks	=		8	6	3

Learning Check 2.7

1. Subtract the following.

a)

H	T	O
5	² 3	^① 7
- 9		
5	2	8

b)

H	T	O
1	⁴ 5	^① 0
- 8		
1	4	2

c)

H	T	O
4	⁶ 7	^① 5
- 9		
4	6	6

d)

H	T	O
9	⁴ 5	^① 1
- 6		
9	4	5

e)

H	T	O
5	³ 4	^① 3
- 7		
5	3	6

f)

H	T	O
1	¹ 2	^① 4
- 7		
1	1	7

g)

H	T	O
8	⁰ 1	^① 5
- 8		
8	0	7

h)

H	T	O
3	³ 4	^① 0
- 3		
3	3	7

i)

H	T	O
7	¹ 2	^① 1
- 4 9		
6	7	2

j)

H	T	O
8	³ 4	^① 0
- 9 3		
7	4	7

k)

H	T	O
⁰ 1	¹ 1	^① 0
- 4 9		
6	1	

l)

H	T	O
⁵ 6	¹ 0	^① 7
- 3 8		
5	6	9

m)

H	T	O
⁰ 1	¹ 0	^① 2
- 5 9		
4	3	

n)

H	T	O
⁵ 6	¹ 2	^① 1
- 5 4		
5	6	7

o)

H	T	O
³ 4	⁴ 5	^① 5
- 5 6		
3	9	9

p)

H	T	O
⁴ 5	¹ 2	^① 3
- 5 9		
4	6	4

q)

H	T	O
¹ 2	⁵ 6	^① 3
-	1	9 4
0	6	9

r)

H	T	O
⁶ 7	¹ 0	^① 7
-	3	4 8
3	5	9

s)

H	T	O
⁸ 9	⁷ 8	^① 1
-	7	9 8
1	8	3

t)

H	T	O
⁷ 8	¹ 0	^① 2
-	1	2 6
6	7	6

u)

H	T	O
² 3	⁶ 7	^① 8
-	1	8 9
1	8	9

v)

H	T	O
¹ 2	² 3	^① 3
-	1	9 5
6	3	8

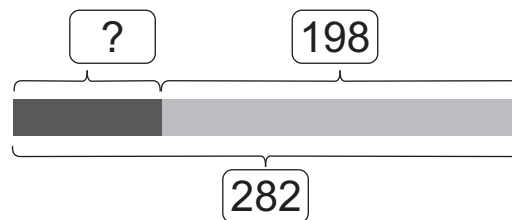
w)

H	T	O
² 3	³ 4	^① 8
-	1	2 9
2	1	9

x)

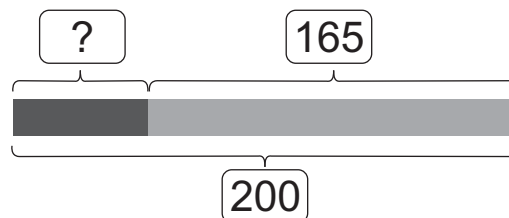
H	T	O
⁴ 5	⁶ 7	^① 5
-	2	9 9
2	7	6

2. Madiha has 198 coins. Ibrahim has 282 coins. How many more coins does Ibrahim has than Madiha?



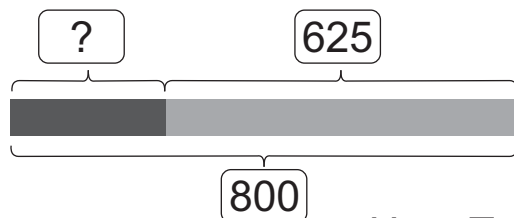
Number of coins Ibrahim has	=	<table border="1"> <tr><td>H</td><td>T</td><td>O</td></tr> <tr><td>¹2</td><td>^①78</td><td>^①2</td></tr> </table>	H	T	O	¹ 2	^① 7 8	^① 2
H	T	O						
¹ 2	^① 7 8	^① 2						
Number of coins Madiha has	= -	<table border="1"> <tr><td>1</td><td>9</td><td>8</td></tr> </table>	1	9	8			
1	9	8						
More coins Ibrahim has	=	<table border="1"> <tr><td>0</td><td>8</td><td>4</td></tr> </table>	0	8	4			
0	8	4						

3. A farm has 200 mango trees and 165 apple trees. How many more mango trees are there than apple trees?



Number of mango trees	=	<table border="1"> <tr><td>H</td><td>T</td><td>O</td></tr> <tr><td>¹2</td><td>^①0</td><td>^①0</td></tr> </table>	H	T	O	¹ 2	^① 0	^① 0
H	T	O						
¹ 2	^① 0	^① 0						
Number of apple trees	= -	<table border="1"> <tr><td>1</td><td>6</td><td>5</td></tr> </table>	1	6	5			
1	6	5						
More mango trees	=	<table border="1"> <tr><td>0</td><td>3</td><td>5</td></tr> </table>	0	3	5			
0	3	5						

4. Ahmad has Rs 625. He wants to buy a book. The cost of book is Rs 800. How much more money does he need to buy that book?



Cost of the book	=	Rs	<table border="1"> <tr> <td>H</td> <td>T</td> <td>O</td> </tr> <tr> <td>8</td> <td>0</td> <td>0</td> </tr> </table>	H	T	O	8	0	0
H	T	O							
8	0	0							
Amount Ahmad has	= -	Rs	<table border="1"> <tr> <td>6</td> <td>2</td> <td>5</td> </tr> </table>	6	2	5			
6	2	5							
More money Ahmad needs	=	Rs	<table border="1"> <tr> <td>1</td> <td>7</td> <td>5</td> </tr> </table>	1	7	5			
1	7	5							

5. In a library, there are 723 books. 289 books are of Mathematics and 273 are of Science. Find the number of books other than Science and Mathematics.

Solution:

First we find the total number of Mathematics and Science books.

Number of mathematics	=	Rs	<table border="1"> <tr> <td>H</td> <td>T</td> <td>O</td> </tr> <tr> <td>2</td> <td>8</td> <td>9</td> </tr> </table>	H	T	O	2	8	9
H	T	O							
2	8	9							
Number of science books	= +	Rs	<table border="1"> <tr> <td>2</td> <td>7</td> <td>3</td> </tr> </table>	2	7	3			
2	7	3							
Total number of books	=	Rs	<table border="1"> <tr> <td>5</td> <td>6</td> <td>2</td> </tr> </table>	5	6	2			
5	6	2							

Now we find the books other mathematics and Science books.

For this we have to subtract.

Total number of books	=	Rs	<table border="1"> <tr> <td>H</td> <td>T</td> <td>O</td> </tr> <tr> <td>5</td> <td>6</td> <td>2</td> </tr> </table>	H	T	O	5	6	2
H	T	O							
5	6	2							
Mathematics and Science books	= -	Rs	<table border="1"> <tr> <td>2</td> <td>8</td> <td>9</td> </tr> </table>	2	8	9			
2	8	9							
Other books	=	Rs	<table border="1"> <tr> <td>2</td> <td>8</td> <td>3</td> </tr> </table>	2	8	3			
2	8	3							

Unit Check Subtraction

1. Encircle the correct options.

a) The difference of 56 and 81 is _____.

i) 35

ii) 27

☒ iii) 25

iv) 28

b) Always subtract tens from _____.

☒ i) tens

ii) ones

iii) hundreds

iv) twos

c) $762 - 485 =$ _____.

i) 233

ii) 237

iii) 238

☒ iv) 277

d) When subtracting, start from _____.

i) tens

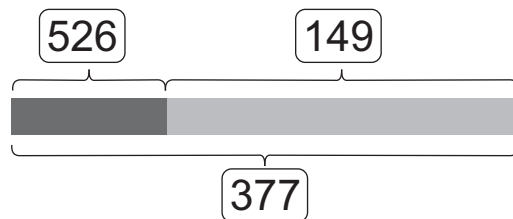
☒ ii) ones

iii) hundreds

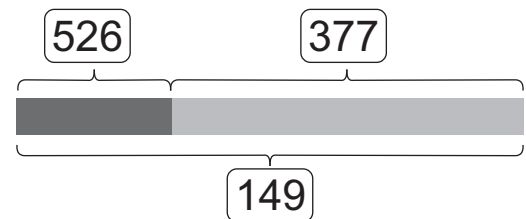
iv) thousands

e) Which of these bar models correctly shows $526 - 377 = 149$?

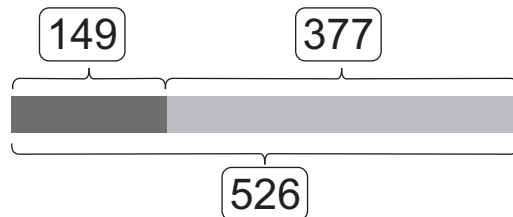
i)



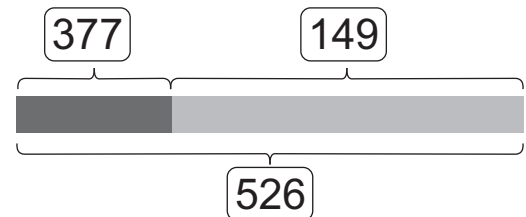
ii)



☒ iii)



iv)



2. Subtract the following.

a)

	T	O
	¹ 2	^① 2
-		3
	1	9

b)

	T	O
	² 3	^① 7
-		9
	2	8

c)

	T	O
	² 3	^① 6
-	2	7
	0	9

d)

	T	O
	⁴ 5	^① 3
-	4	4
	0	9

e)

H	T	O
4	5	6
—		3
4	5	3

f)

H	T	O
5	⁵ 6	^① 3
—		2 7
5	3	6

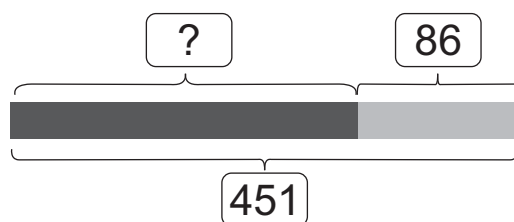
g)

H	T	O
9	¹ 2	^① 1
—		4 0 2
5	1	9

h)

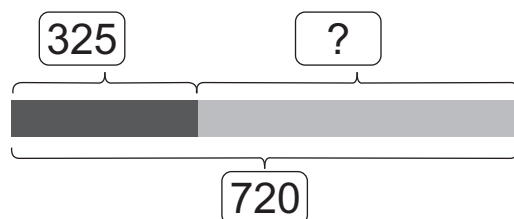
H	T	O
² 3	^① 0	9
—		2 7 3
0	3	6

3. A factory manufactured 451 electric heaters in a week. If 86 of them are defective, how many heaters are non-defective?



Total number of electric heaters	=	<table border="1"> <tr><td>H</td><td>T</td><td>O</td></tr> <tr><td>³4</td><td>^①5</td><td>^①1</td></tr> </table>	H	T	O	³ 4	^① 5	^① 1
H	T	O						
³ 4	^① 5	^① 1						
Number of defective heaters	= —	<table border="1"> <tr><td></td><td>8</td><td>6</td></tr> </table>		8	6			
	8	6						
Number of non-defective heaters	=	<table border="1"> <tr><td>3</td><td>6</td><td>5</td></tr> </table>	3	6	5			
3	6	5						

4. There are 720 animals and birds in a farm. If there are 325 animals, how many birds are there?



Total number of animals and birds	=	<table border="1"> <tr><td>H</td><td>T</td><td>O</td></tr> <tr><td>⁶7</td><td>¹2</td><td>^①0</td></tr> </table>	H	T	O	⁶ 7	¹ 2	^① 0
H	T	O						
⁶ 7	¹ 2	^① 0						
Number of animals	= —	<table border="1"> <tr><td>3</td><td>2</td><td>5</td></tr> </table>	3	2	5			
3	2	5						
Number of birds	=	<table border="1"> <tr><td>3</td><td>9</td><td>5</td></tr> </table>	3	9	5			
3	9	5						

5. Aarsalan wants to buy a geometry box that costs Rs 325 and a storybook that costs Rs 155. He has Rs 220. How much more money does he need to buy the two items?

Solution:

First we find the total cost of geometry box and storybook.

			H	T	O	
Cost of geometry box	=	Rs	3	2	5	
Cost of storybook	=	+	Rs	1	5	5
Total cost	=	Rs	4	8	0	

Now we find money he needs to buy both items.

			H	T	O	
Total amount	=	Rs	4	8	0	
Money he has	=	-	Rs	2	2	0
Money he needs	=	Rs	2	6	0	

iii) Multiplication

Learning Check 2.8

1. Look at the groups of objects and then write it as repeated addition.

a)


$$\underline{4} + \underline{4} + \underline{4} = \underline{12}$$

b)


$$\underline{2} + \underline{2} + \underline{2} + \underline{2} = \underline{8}$$

2. Write the following as repeated addition.

a) $2 \times 4 = \underline{4 \times 4}$

b) $3 \times 2 = \underline{2 \times 2 \times 2}$

c) 4 times 3 = $\underline{3 \times 3 \times 3 \times 3}$

d) 2 times 5 = $\underline{5 \times 5}$

3. Look at the groups of objects and fill in the blanks.



There are 7 stems.

Each stem has 5 leaves.

$$\begin{aligned}
 \text{Total number of leaves} &= \underline{5} + \underline{5} + \underline{5} + \underline{5} + \underline{5} + \\
 &\quad \underline{5} + \underline{5} \\
 &= \underline{7} \text{ times } \underline{5} \\
 &= \underline{7} \times \underline{5} \\
 &= \underline{35}
 \end{aligned}$$

There are 35 leaves altogether.

b)



There are 6 tricycles.

Each tricycle has 3 wheels.

$$\begin{aligned}
 \text{Total number of wheels} &= \underline{3} + \underline{3} + \underline{3} + \underline{3} + \\
 &\quad \underline{3} + \underline{3} \\
 &= \underline{6} \text{ times } \underline{3} \\
 &= \underline{6} \times \underline{3} \\
 &= \underline{18}
 \end{aligned}$$

There are 18 wheels altogether.

4 Look at the pictures and fill in the boxes.

a)



$$\begin{aligned}
 &\boxed{2} + \boxed{2} + \boxed{2} + \boxed{2} = \boxed{8} \\
 &\boxed{4} \times \boxed{2} = \boxed{8}
 \end{aligned}$$

b)



$$\begin{aligned}
 &\boxed{5} + \boxed{5} + \boxed{5} + \boxed{5} + \boxed{5} = \boxed{25} \\
 &\boxed{5} \times \boxed{5} = \boxed{25}
 \end{aligned}$$

Learning Check 2.9

1. Count in steps and complete the sequences.

a) 2 4 6 8 10 12 14 16 18 20

b) 3 6 9 12 15 18 21 24 27 30

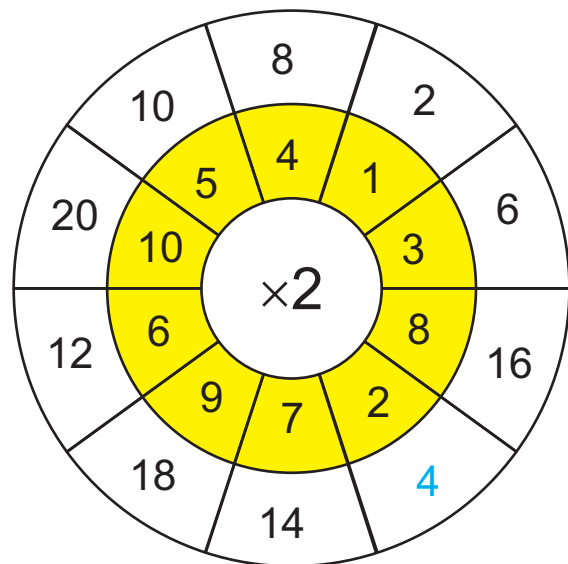
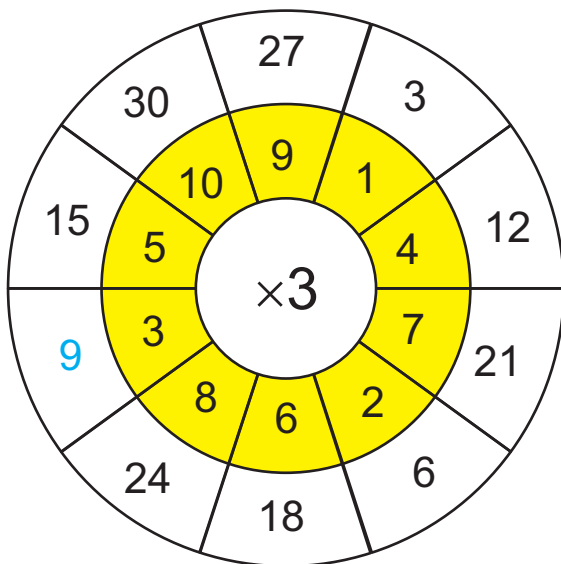
c) 4 8 12 16 20 24 28 32 36 40

d) 5 10 15 20 25 30 35 40 45 50

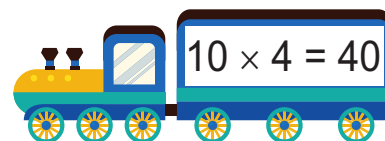
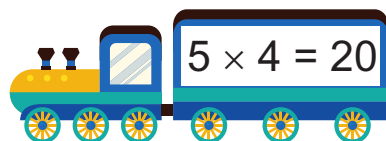
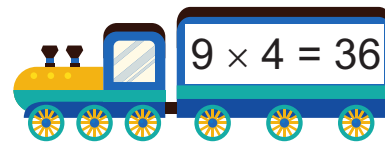
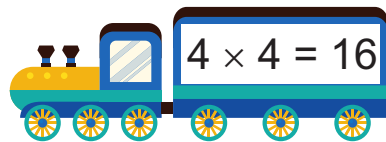
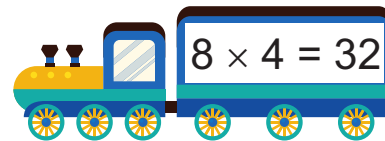
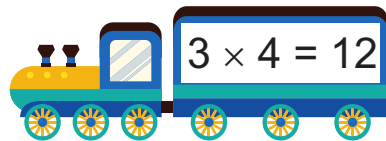
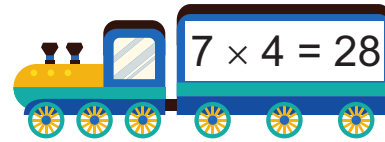
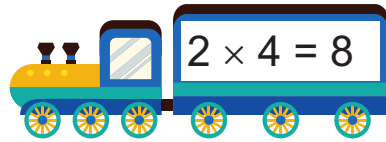
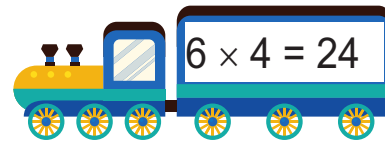
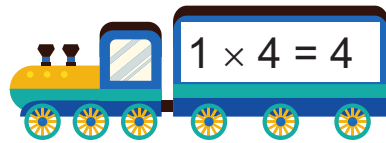
e) 10 20 30 40 50 60 70 80 90 100

Learning Check 2.10

1. Complete the multiplication tables of 2 and 3.



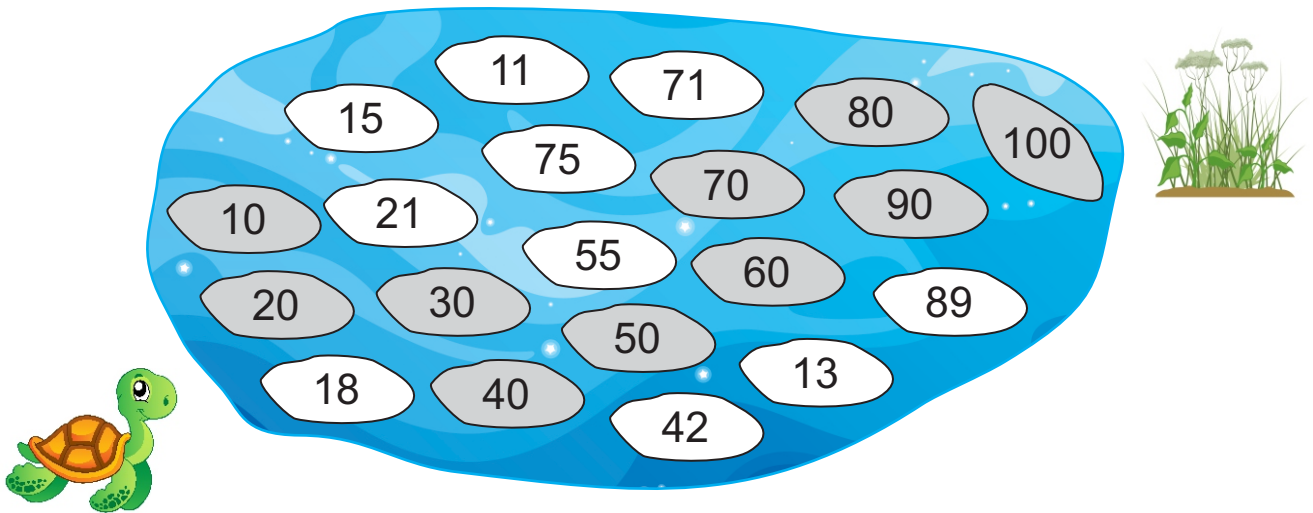
2. Complete the multiplication table of 4.



3. Complete the multiplication table of 5.

1	×	5	=	5
2	×	5	=	10
3	×	5	=	15
4	×	5	=	20
5	×	5	=	25
6	×	5	=	30
7	×	5	=	35
8	×	5	=	40
9	×	5	=	45
10	×	5	=	50

4. Help the turtle to cross the river by colouring the 10 times table.



5. Multiply and write the answers.

$$5 \times 3 = 15$$

$$2 \times 4 = 8$$

$$6 \times 5 = 30$$

$$8 \times 2 = 16$$

$$2 \times 10 = 20$$

$$7 \times 4 = 28$$

$$9 \times 10 = 90$$

$$6 \times 2 = 12$$

$$3 \times 4 = 12$$

$$5 \times 5 = 25$$

$$\begin{array}{r} 3 \\ \times 5 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 6 \\ \times 4 \\ \hline 24 \end{array}$$

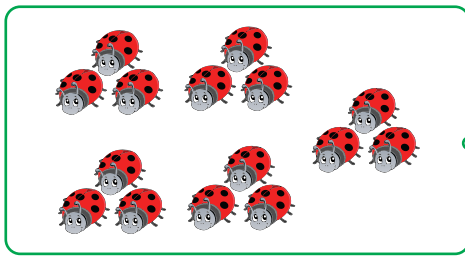
$$\begin{array}{r} 9 \\ \times 4 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 7 \\ \times 2 \\ \hline 14 \end{array}$$

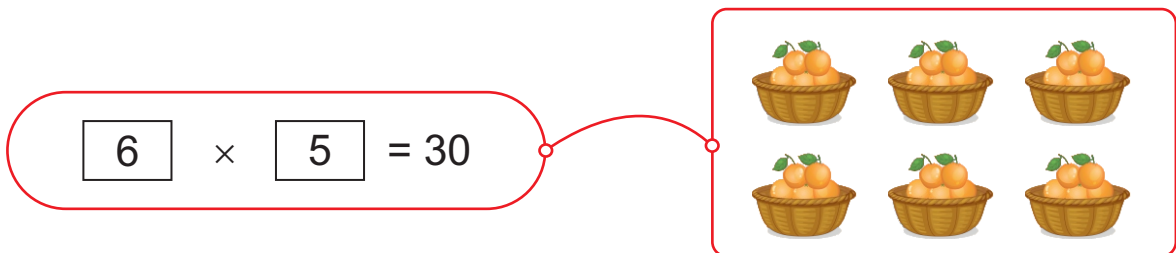
$$\begin{array}{r} 6 \\ \times 3 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 8 \\ \times 5 \\ \hline 40 \end{array}$$

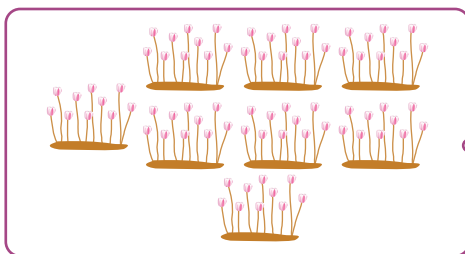
6. Look at the pictures and complete the multiplication sentences.



$$5 \times \boxed{3} = 15$$



$$\boxed{6} \times \boxed{5} = 30$$



$$\boxed{8} \times \boxed{10} = \boxed{80}$$

Learning Check 2.11

1. Saba has 10 packs of stickers. Each pack has 5 stickers in it. How many stickers are there altogether?



$$\begin{array}{rcl} \text{Number of sticker packs} & = & \boxed{10} \\ \text{Number of stickers in each pack} & = \times & \boxed{5} \\ \hline \text{Number of stickers altogether} & = & \boxed{50} \end{array}$$

2. On a bookshelf, there are 5 books. How many total books will there be on 4 such shelves?



$$\begin{array}{rcl} \text{Number of books on 1 bookshelf} & = & \boxed{5} \\ \text{Number of bookshelves} & = \times & \boxed{4} \\ \hline \text{Total number of books} & = & \boxed{20} \end{array}$$

3. A bunch of cherries has 4 cherries. How many cherries will there be in 7 such bunches?



$$\begin{array}{rcl} \text{Number of bunches} & = & \boxed{7} \\ \text{Number of cherries in 1 bunch} & = \times & \boxed{4} \\ \hline \text{Total number of cherries} & = & \boxed{28} \end{array}$$

4. Ibrahim recites 2 pages of the Holy Quran every day. How many pages will he recite in 10 days?

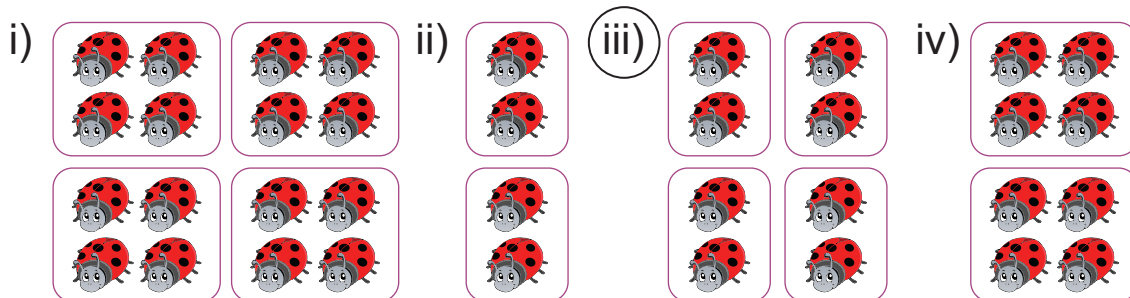


$$\begin{array}{rcl}
 \text{Number of days} & = & \boxed{10} \\
 \text{Number of pages recited every day} & = & \times \boxed{2} \\
 \hline
 \text{Total number of pages recited} & = & \boxed{20}
 \end{array}$$

Unit Check Multiplication

1. Encircle the correct options.

a) Which of the following shows 4 groups of 2?



b) $5 + 5 + 5 =$ _____.

i) 5 times 5 ii) 5 times 3 iii) 3 times 3 **iv) 3 times 5**

c) 2 times 4 is the same as _____.

i) $2 + 4$ **ii) 2×4** iii) $2 + 2$ iv) $4 - 2$

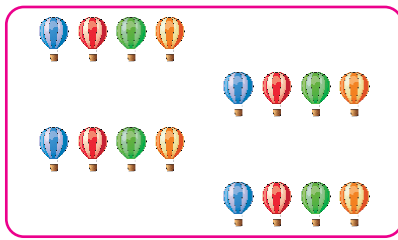
d) 5 cats have _____ legs altogether.

i) 10 ii) 15 **iii) 20** iv) 25

e) 4 groups of 5 kids each equals _____ kids altogether.

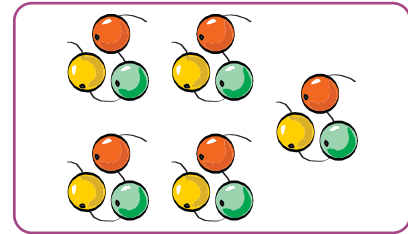
i) 9 **ii) 20** iii) 1 iv) 10

2. Look at the groups of objects and then write it as repeated addition.



$$\underline{4} + \underline{4} + \underline{4} + \underline{4} = \underline{16}$$

$$\underline{3} + \underline{3} + \underline{3} + \underline{3} + \underline{3} = \underline{15}$$



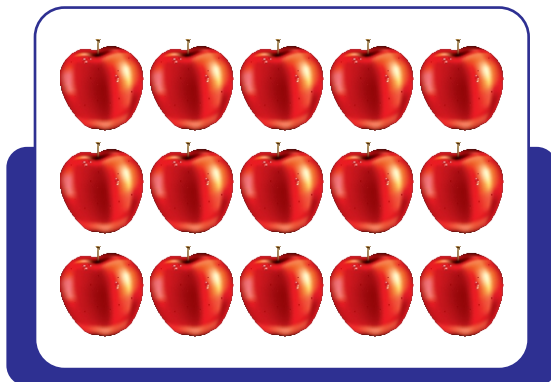
3. Write the following as repeated addition.

a) $5 \times 3 = \underline{3 + 3 + 3 + 3 + 3}$

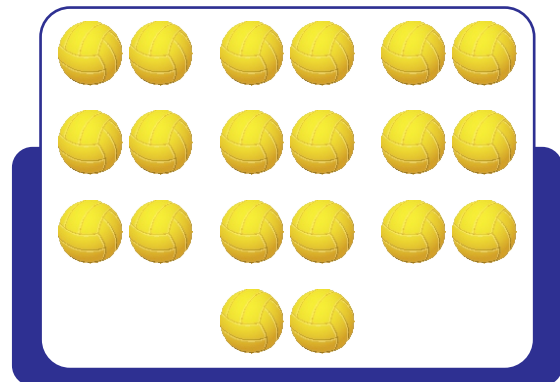
b) 8 times 2 = $\underline{2 + 2 + 2 + 2 + 2 + 2 + 2 + 2}$

4. Draw groups of objects according to the given multiplication sentences.

a) $3 \times 5 = 15$



b) $10 \times 2 = 20$



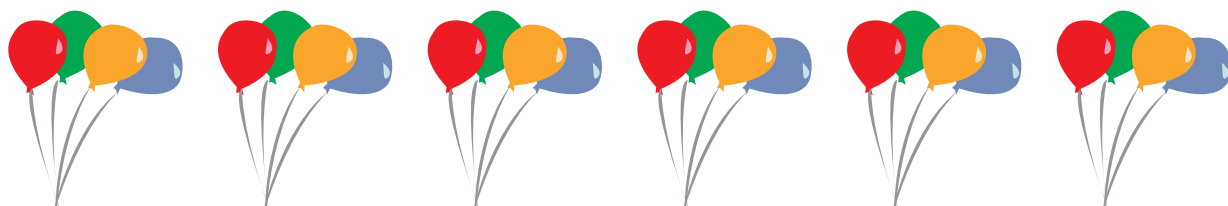
5. Look at the pictures and fill in the boxes.



$$\boxed{2} + \boxed{2} + \boxed{2} = \boxed{6}$$

$$\boxed{3} \times \boxed{2} = \boxed{6}$$

b)



$$4 + 4 + 4 + 4 + 4 + 4 = 24$$

$$6 \times 4 = 24$$

6. Count in steps of 3 and complete the sequence.

3 6 9 12 15 18 21 24 27 30

7. Count in steps of 5 and complete the sequence.

5 10 15 20 25 30 35 40 45 50

8. Complete the multiplication tables.

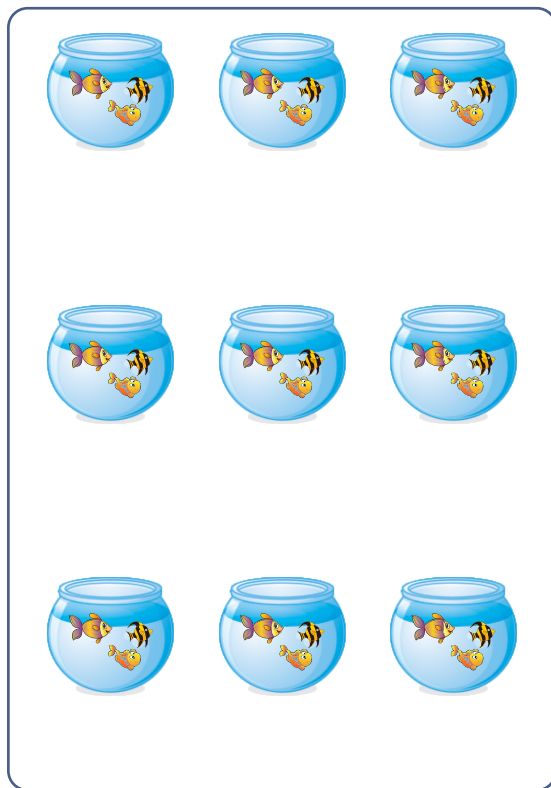
1	×	2	=	2
2	×	2	=	4
3	×	2	=	6
4	×	2	=	8
5	×	2	=	10
6	×	2	=	12
7	×	2	=	14
8	×	2	=	16
9	×	2	=	18
10	×	2	=	20

1	×	3	=	3
2	×	3	=	6
3	×	3	=	9
4	×	3	=	12
5	×	3	=	15
6	×	3	=	18
7	×	3	=	21
8	×	3	=	24
9	×	3	=	27
10	×	3	=	30

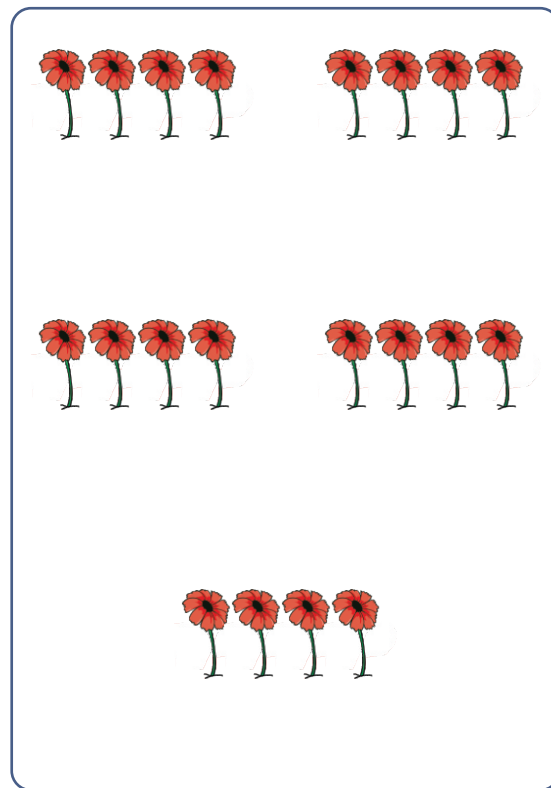
9. Draw lines to match with the correct answers.

2×4	20
3×3	12
4×5	9
7×10	8
6×2	70

10. Look at the pictures and complete the multiplication sentences.



$$\boxed{9} \times \boxed{3} = \boxed{27}$$



$$\boxed{5} \times \boxed{4} = \boxed{20}$$



$$\boxed{10} \times \boxed{2} = \boxed{20}$$

11. Amir used 3 ribbons to use on a gift box. If he packed 6 gift boxes, how many ribbons did he use altogether?



Number of gift boxes = $\boxed{6}$

Number of ribbons used on 1 gift box = $\times \boxed{3}$

Total number of ribbons used = $\boxed{18}$

12. Maryam made one glass of lemonade by using 2 lemons. How many lemons will she use to make 8 glasses of lemonade?



Number of lemons used for 1 glass = $\boxed{2}$

Number of glasses = $\times \boxed{8}$

Total number of lemons used = $\boxed{16}$

iv) Division

Learning Check 2.12

1. Rabia wants to distribute 20 cookies among 4 kids. How many biscuits will each kid get?

$$20 - 4 = 16 \text{ (1st time subtraction)}$$

$$16 - 4 = 12 \text{ (2nd time subtraction)}$$

$$12 - 4 = 8 \text{ (3rd time subtraction)}$$

$$8 - 4 = 4 \text{ (4th time subtraction)}$$

$$4 - 4 = 0 \text{ (5th time subtraction)}$$

So, each kid will get 5 cookies.



2. There are 16 cupcakes. Nida puts 4 cupcakes on each plate. How many plates have cupcakes on them?



$$16 - 4 = 12 \text{ (1st time subtraction)}$$

$$12 - 4 = 8 \text{ (2nd time subtraction)}$$

$$8 - 4 = 4 \text{ (3rd time subtraction)}$$

$$4 - 4 = 0 \text{ (4th time subtraction)}$$

$$16 \div 4 = 4$$

After subtraction 4 times, we have 0 items left.

So, 4 plates have cupcakes on them.

3. Divide using successive subtraction.

a) $15 \div 3$

$$15 - 3 = 12 \quad 1\text{st}$$

$$12 - 3 = 9 \quad 2\text{nd}$$

$$9 - 3 = 6 \quad 3\text{rd}$$

$$6 - 3 = 3 \quad 4\text{th}$$

$$3 - 3 = 0 \quad 5\text{th}$$

So, $15 \div 3 = 5$.

b) $40 \div 10 = \underline{\quad}$

$$40 - 10 = 30 \quad 1\text{st}$$

$$30 - 10 = 20 \quad 2\text{nd}$$

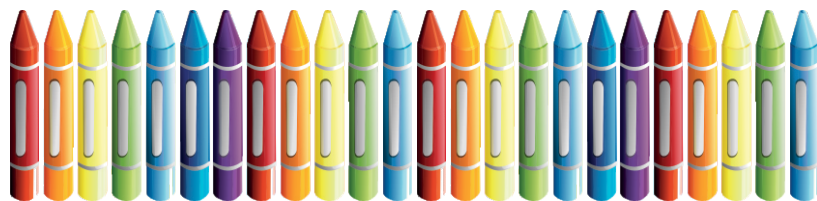
$$20 - 10 = 10 \quad 3\text{rd}$$

$$10 - 10 = 0 \quad 4\text{th}$$

So, $40 \div 10 = 4$.

Learning Check 2.13

1. Share 24 crayons among 4 kids equally.



$$\boxed{24} \div \boxed{4} = \boxed{6}$$

Let's recall table of 4 till 24.

$$1 \times 4 = 4$$

$$2 \times 4 = 8$$

$$3 \times 4 = 12$$

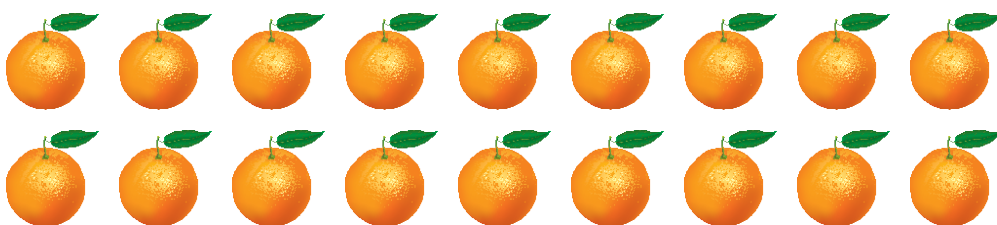
$$4 \times 4 = 16$$

$$5 \times 4 = 20$$

$$6 \times 4 = 24$$

6 times 4 equals 24, so there are 6 crayons for each kids.

2. Divide 18 oranges in 3 baskets equally.



$$\boxed{18} \div \boxed{3} = \boxed{6}$$

Let's recall table of 3 till 18.

$$1 \times 3 = 3$$

$$2 \times 3 = 6$$

$$3 \times 3 = 9$$

$$4 \times 3 = 12$$

$$5 \times 3 = 15$$

$$6 \times 3 = 18$$

6 times 3 equals 18, so there will be 6 oranges in each basket.

3. Share 30 balloons among 5 kids equally.



$$\boxed{30} \div \boxed{5} = \boxed{6}$$

Let's recall table of 5 till 30.

$$1 \times 5 = 5$$

$$2 \times 5 = 10$$

$$3 \times 5 = 15$$

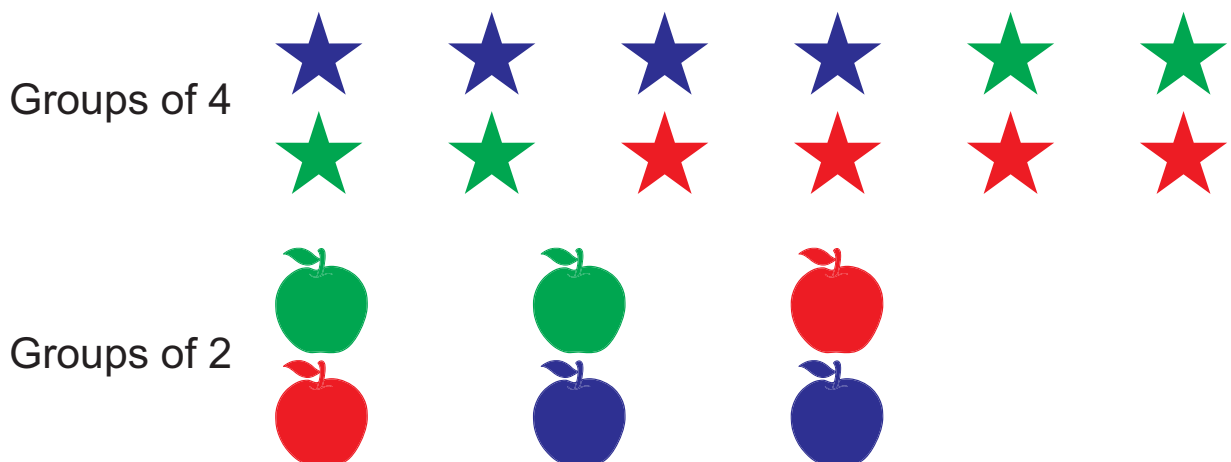
$$4 \times 5 = 20$$

$$5 \times 5 = 25$$

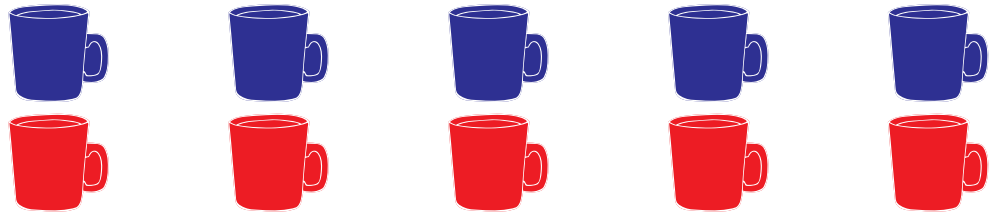
$$6 \times 5 = 30$$

So, each kid will get 6 balloons.

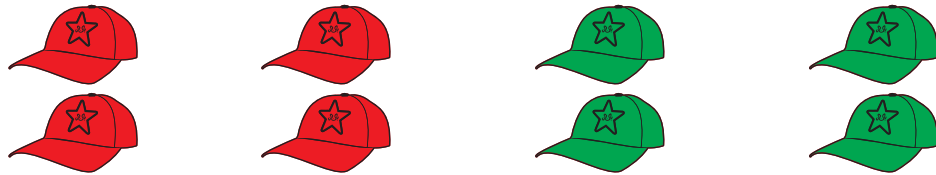
4. Colour the shapes to divide them in groups.



Groups of 5



Groups of 4



5. Divide the following.

$$50 \div 10 = 5$$

$$27 \div 3 = 9$$

$$40 \div 10 = 4$$

$$20 \div 4 = 5$$

$$2 \div 2 = 1$$

$$18 \div 2 = 9$$

$$20 \div 2 = 10$$

$$14 \div 2 = 7$$

$$12 \div 4 = 3$$

Learning Check 2.14

1. 50 rupees is divided among 5 needy children.
How many rupees does each child get?

$$\boxed{50} \div \boxed{5} = \boxed{10}$$



So, each child gets Rs 10.

2. There are 28 cupcakes in 4 trays.
How many cupcakes are there in each tray?

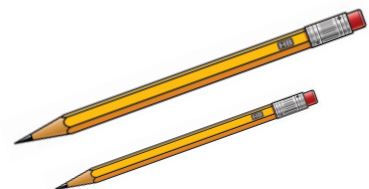
$$\boxed{28} \div \boxed{4} = \boxed{7}$$



So, there are 7 cupcakes in each tray.

3. Madeeha bought 5 pencils for rupees 35.
How much does each pencil cost?

$$\boxed{35} \div \boxed{5} = \boxed{7}$$



So, each pencil costs Rs 7.

4. Salman learned 30 verses of the Holy Quran in 10 days with an equal number of verses each day. How many verses did he learn daily?

$$\boxed{30} \div \boxed{10} = \boxed{3}$$

So, he learnt 3 verses daily.



5. Aliya wants to put 40 cookies on 5 plates equally. How many cookies should be on each plate?

$$\boxed{40} \div \boxed{5} = \boxed{8}$$

So, there should be 8 cookies on each plate.



Learning Check 2.15

1. Solve these mixed number stories. Take help from clues and give reasons for choosing the correct operation.

- i) Umar saved Rs 560 and Haroon saved Rs 326 from their pocket money. How much more did Umar save than Haroon?

Money saved by Umar = Rs 560

Money saved by Haroon = Rs 326

More money saved by Umar = Rs 234

So, Umar saved Rs 234 more than Haroon.

- ii) Umar saved Rs 560 and Haroon saved Rs 326 from their pocket money. How much less did Haroon save than Umar?

Money saved by Umar = Rs 560

Money saved by Haroon = Rs 326

Less money saved by Haroon = Rs 234

So, Haroon saved Rs 234 less than Umar.

iii) Umar saved Rs 560 and Haroon saved Rs 326 from their pocket money. How much money did they save altogether?

Money saved by Umar = Rs 560

Money saved by Haroon = + Rs 326

Total money saved altogether = Rs 886

So, altogether they saved Rs 886.

2. Ibrahim has 4 boxes of crayons. Each box has 5 crayons in it.

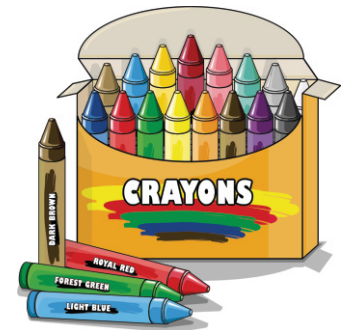
i) How many crayons are there altogether?

Boxes of crayons Ibrahim has = 4

Crayons in each box = + 5

Total crayons altogether = 20

So, there are 20 crayons altogether



ii) If there are 30 crayons in 5 boxes, how many crayons will be there in each box?

Total crayons = 30

Total boxes = 5

Crayons in each box = $30 \div 5$
= 6

So, there will be 6 crayons in each box.

Unit Check Division

1. Encircle the correct options.

a) Division means repeated _____.

(i) addition ii) subtraction iii) division iv) multiplication

b) When a number is divided by itself, the answer is always

_____.

i) itself

(ii) 1

iii) 10

iv) 0

c) $20 \div 1 =$ _____.

i) 0

ii) 1

iii) 10

iv) 20

d) The symbol for division is _____.

i) $\times$

b) $+$

iii) $\div$

iv) $-$

e) Which of these is equal to 9?

i) $40 \div 5$

ii) $32 \div 4$

iii) $18 \div 2$

iv) $21 \div 3$

2. There are 30 stickers. Ali pastes 10 stickers on 1 notebook. Use repeated subtraction to tell how many notebooks have stickers on them.

$$30 - 10 = 20 \text{ (1st)}$$

$$20 - 10 = 10 \text{ (2nd)}$$

$$10 - 10 = 0 \text{ (3rd)}$$

$$30 \div 10 = \underline{\quad 3 \quad}$$



After subtracting 3 times, we get 0.

So, 3 notebooks have stickers on them.

3. Divide the following and write the answer.

a) $40 \div 4 =$ 10

b) $25 \div 5 =$ 5

c) $30 \div 10 =$ 3

d) $10 \div 10 =$ 1

e) $30 \div 3 =$ 10

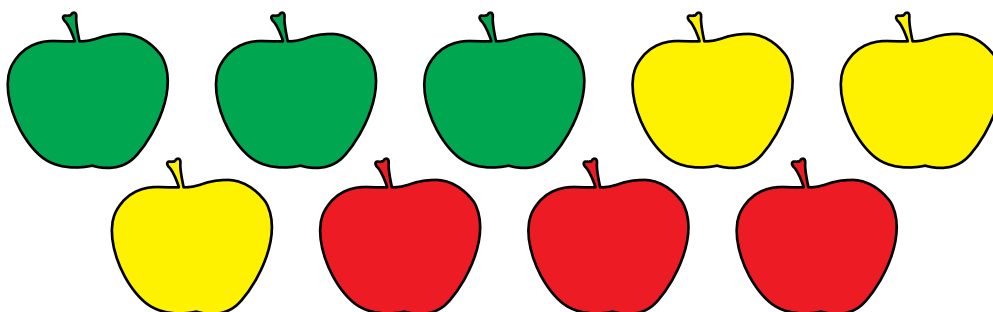
f) $24 \div 4 =$ 6

g) $6 \div 3 =$ 2

h) $16 \div 2 =$ 8

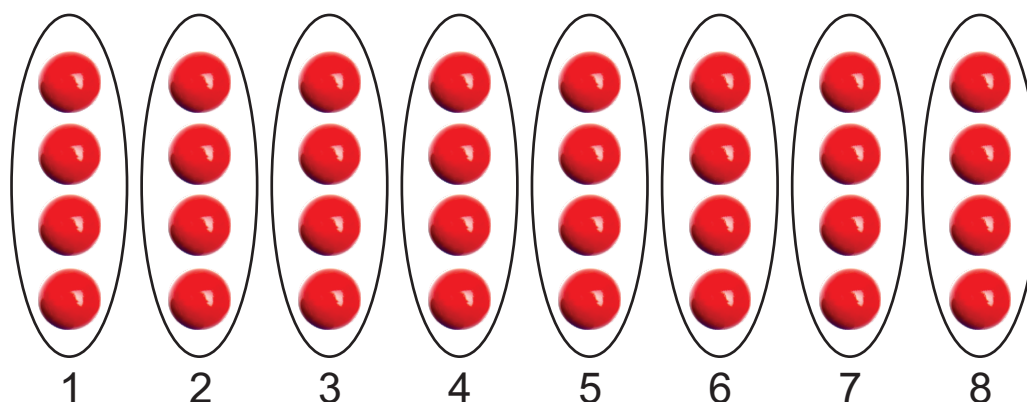
i) $9 \div 3 =$ 3

4. Colour the apples green, yellow and red to get 3 equal groups.



Each group will have 3 apples.

5. Divide these beads equally into groups and answer the questions.



a) How many groups of 4 can be made?

$$\boxed{32} \div \boxed{4} = \boxed{8}$$

b) How many groups of 8 can be made?

$$\boxed{32} \div \boxed{8} = \boxed{4}$$

6. Share 8 stems of sugar cane equally between 2 elephants.



$$8 \div 2 = \underline{4}$$

Each elephant gets 4 stems of sugar cane.

7. The price of 4 candies is Rs 24.
How much does each candy cost?



$$\boxed{24} \div \boxed{4} = \boxed{6}$$

So, each candy costs Rs 6.

8. Fatima put 27 glasses in 3 shelves equally.
How many glasses are there on each shelf?

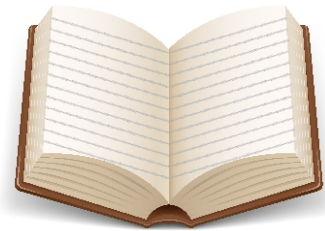


$$\boxed{27} \div \boxed{3} = \boxed{9}$$

So, there are 9 glasses on each shelf.

9. Solve these mixed number stories. Take help from clues and give reasons for choosing the correct operation.

- a) There are 140 pages in one book and 390 pages in the other book. How many pages are there altogether?



$$\begin{array}{rcl} \text{Number of pages in one book} & = & 140 \\ \text{Number of pages in another book} & = & + 390 \\ \hline \text{Total number of pages altogether} & = & 530 \end{array}$$

So, there are 530 pages altogether.

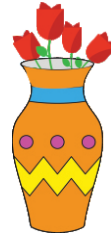


- b) A shopkeeper has 450 toy trains. He sold 190 toy trains. How many toy trains are left?

$$\begin{array}{rcl} \text{Total toy trains} & = & \begin{array}{r} 3 \\ 450 \end{array} \\ \text{Toy trains sold} & = & - 190 \\ \hline \text{Toy trains left} & = & 260 \end{array}$$

So, there are 260 toy trains are left.

- c) There are 4 flowers in a vase. How many flowers are there in 5 such vases?



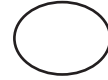
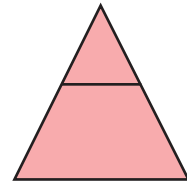
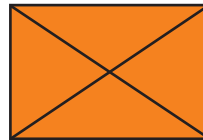
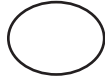
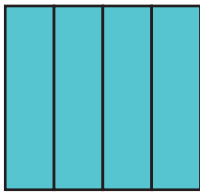
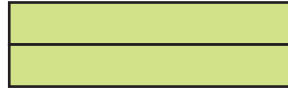
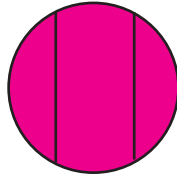
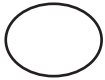
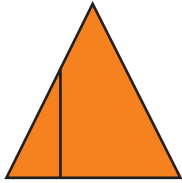
$$\begin{array}{rcl} \text{Number of flowers in one vase} & = & 4 \\ \text{Number of vases} & = & \times 5 \\ \hline \text{Total number of flowers} & = & 20 \\ \hline \end{array}$$

So, there are 20 flowers altogether.

Unit 3: Fractions

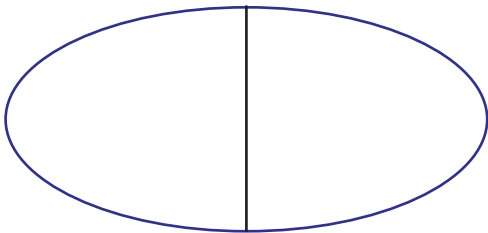
Learning Check 3.1

1. Tick (✓) the shapes that are divided into equal parts.

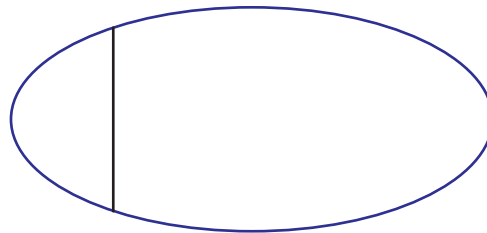


2. Divide the shapes according to the labels.

Equal parts



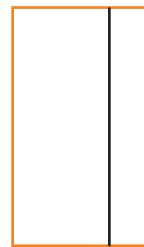
Unequal parts



Equal parts



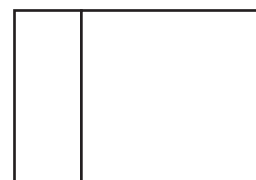
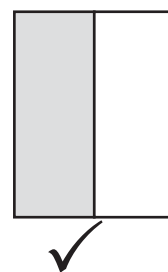
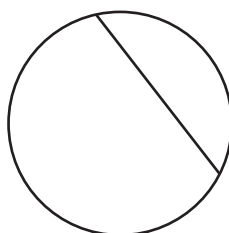
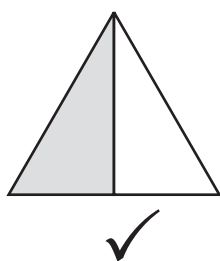
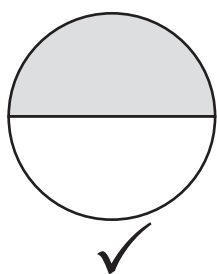
Unequal parts



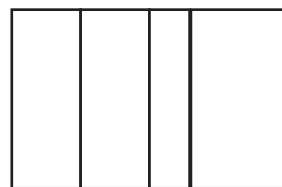
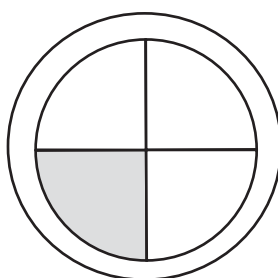
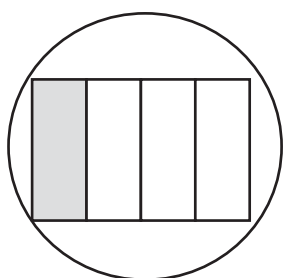
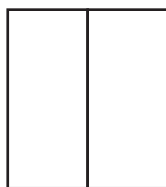
Equal parts	Unequal parts
Equal parts	Unequal parts

Learning Check 3.2

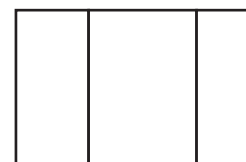
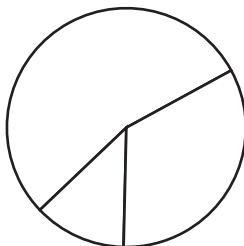
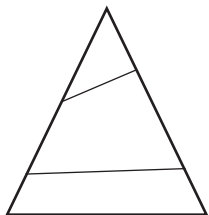
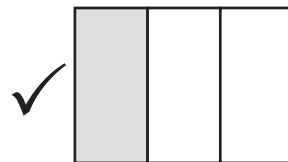
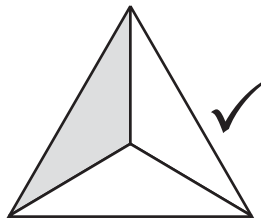
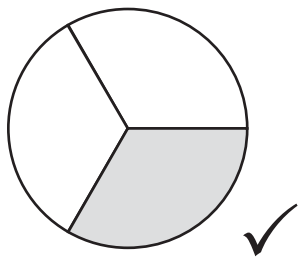
1. Tick (✓) the shapes that are divided into halves. Then colour one half of each.



2. Circle the shapes that are divided into quarters. Then colour one quarter of each.



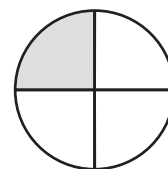
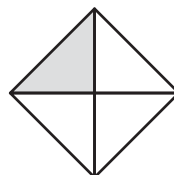
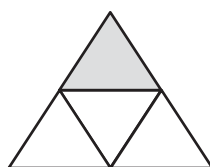
3. Tick (✓) the shapes that are divided into three equal parts.
Then colour one third of each.



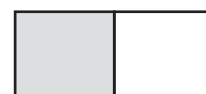
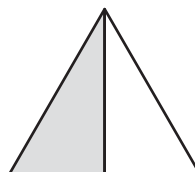
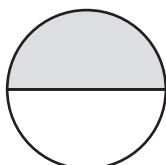
Learning Check 3.3

1. Colour the shapes according to the given fractions.

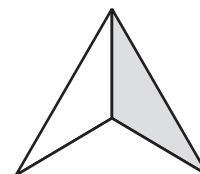
a) $\frac{1}{4}$ (Coloured parts)
4 (Total Parts)



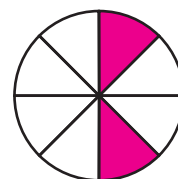
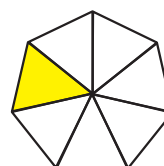
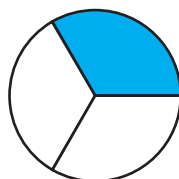
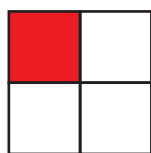
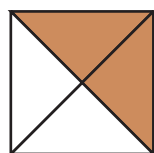
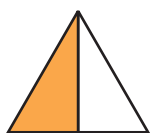
b) $\frac{1}{2}$ (Coloured parts)
2 (Total Parts)



c) $\frac{1}{3}$ (Coloured parts)
3 (Total Parts)

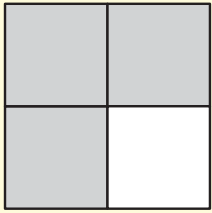
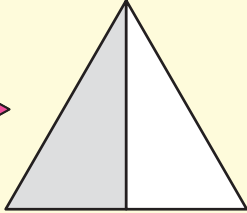
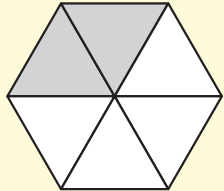
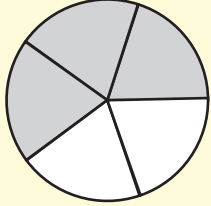
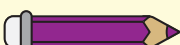
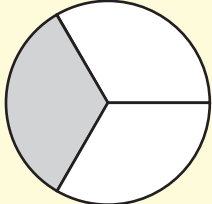
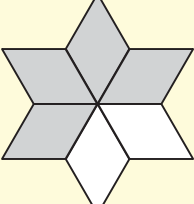
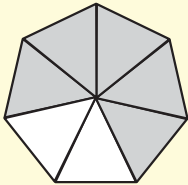
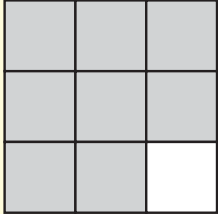


2. Tick (✓) the shapes showing unit fractions.

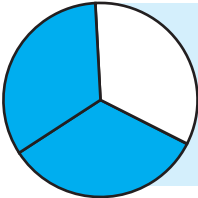


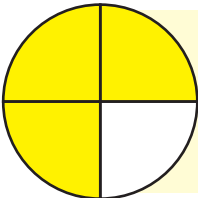
Learning Check 3.4

1. Colour the shapes for each fraction.

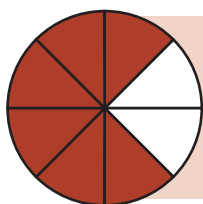
a $\frac{3}{4}$  	b $\frac{1}{2}$  
c $\frac{2}{6}$  	d $\frac{3}{5}$  
e $\frac{1}{3}$  	f $\frac{4}{6}$  
g $\frac{5}{7}$  	h $\frac{8}{9}$  

2. Circle the correct fraction.

a)  $\frac{2}{7}$ $\frac{2}{3}$ $\frac{3}{4}$ $\frac{1}{4}$

b)  $\frac{4}{7}$ $\frac{5}{6}$ $\frac{3}{4}$ $\frac{5}{7}$

c)



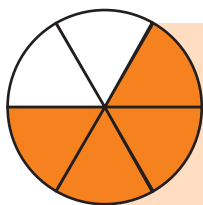
$$\frac{2}{5}$$

$$\frac{3}{6}$$

$$\frac{6}{8}$$

$$\frac{3}{8}$$

d)



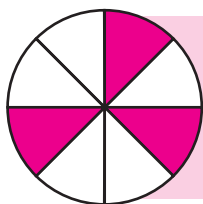
$$\frac{5}{7}$$

$$\frac{4}{6}$$

$$\frac{2}{4}$$

$$\frac{5}{8}$$

e)



$$\frac{6}{8}$$

$$\frac{3}{5}$$

$$\frac{3}{8}$$

$$\frac{5}{7}$$

Unit Check 3

1. Encircle the correct options.

a) A fraction shows part of a whole which is divided into _____ parts.

i) zero

ii) equal

iii) unequal

iv) opposite

b) Which of these shows one quarter?

i) $\frac{1}{2}$

ii) $\frac{1}{3}$

iii) $\frac{1}{4}$

iv) $\frac{1}{5}$

c) Which of these is a unit fraction?

i) $\frac{1}{3}$

ii) $\frac{2}{3}$

iii) $\frac{2}{5}$

iv) $\frac{3}{4}$

d) Four _____ make one whole.

i) halves

ii) thirds

iii) fourths

iv) fifths

e) Which shape is representing $\frac{5}{10}$?

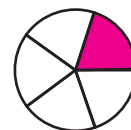
i)



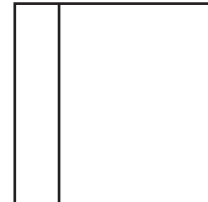
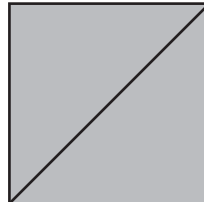
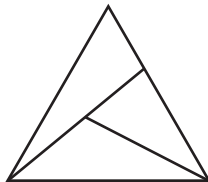
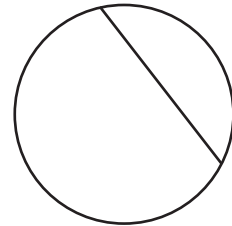
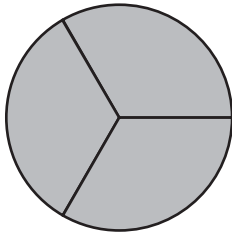
iii)



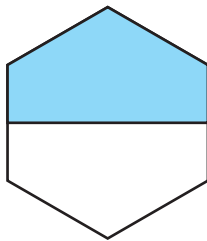
iv)



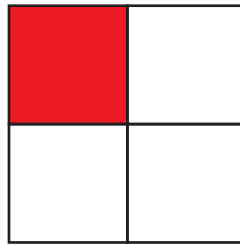
2. Colour the shapes which are divided into equal parts.



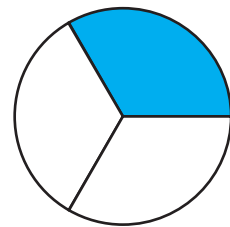
3. Write the fraction for the shaded part for each of these figures.



$\frac{1}{2}$

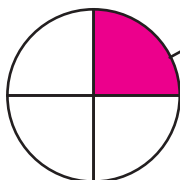


$\frac{1}{4}$



$\frac{1}{3}$

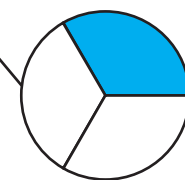
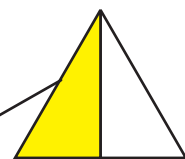
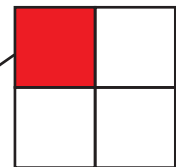
4. Match the shapes with the correct labels.



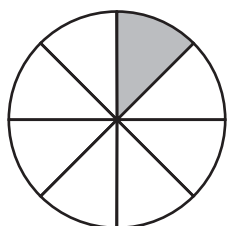
One third

One quarter

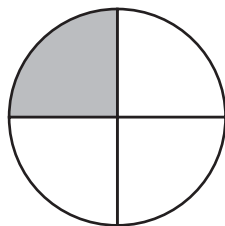
One half



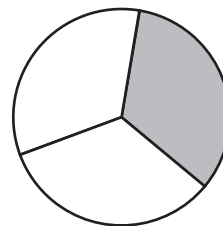
5. Colour 1 part of each shape and write the fraction.



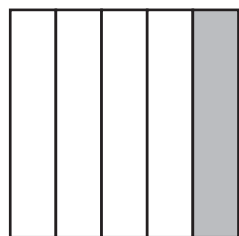
$\frac{1}{8}$



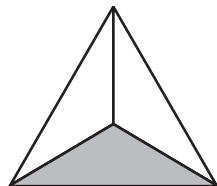
$\frac{1}{4}$



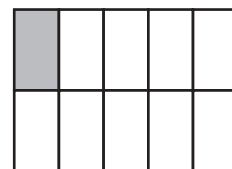
$\frac{1}{3}$



$\frac{1}{5}$



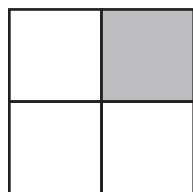
$\frac{1}{3}$



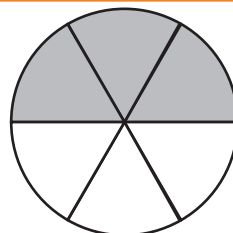
$\frac{1}{10}$

6. Look at the fractions and colour the shapes according to the fractions.

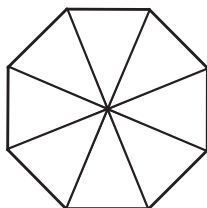
$\frac{1}{4}$



$\frac{3}{6}$



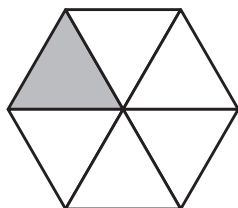
$\frac{2}{8}$



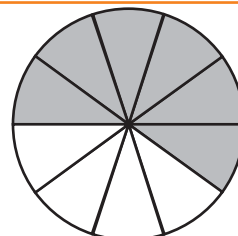
$\frac{4}{9}$



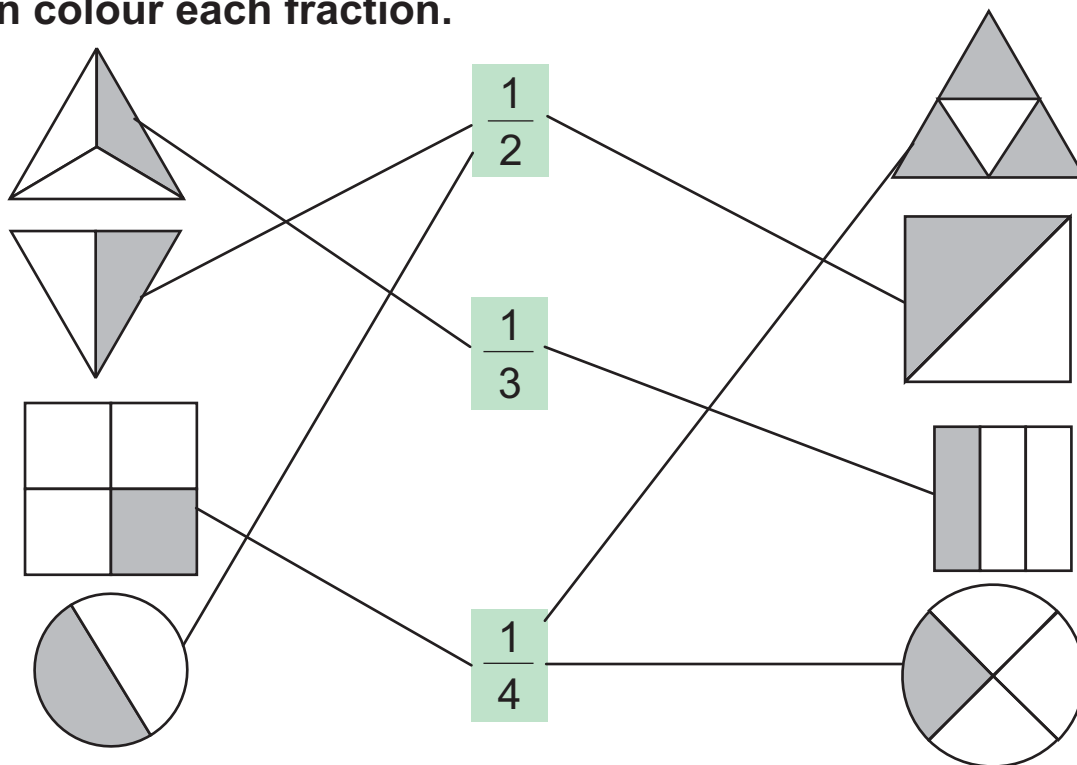
$\frac{1}{6}$



$\frac{6}{10}$



7. Match the shape with the fraction in which it is equally divided.
Then colour each fraction.

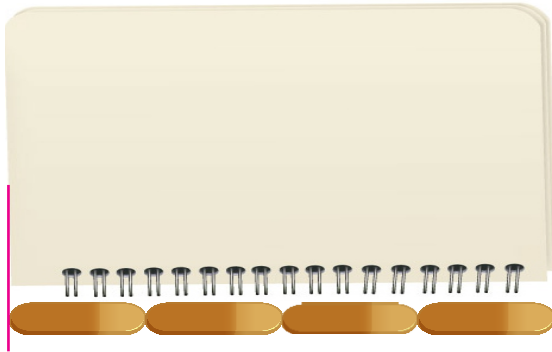


Unit 4: Measurement

Learning Check 4.1

Measure the length of these objects and then compare them.

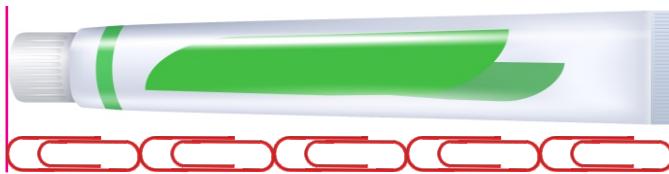
a)



The notebook is 4 sticks long. The frame is 3 sticks long.

The notebook is longer than the photo frame.

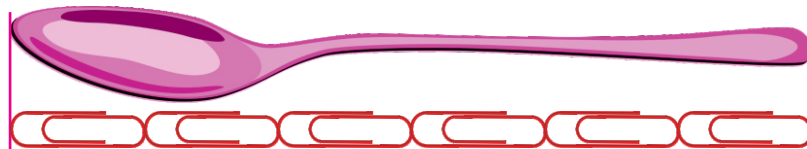
b)



The toothpaste is 5 paper clips long.



The crayon is 4 paper clips long.



The spoon is 6 paper clips long.

The toothpaste is shorter than the spoon.

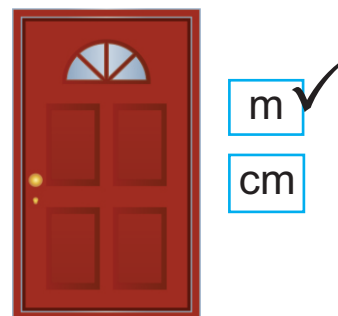
The crayon is shorter than the toothpaste.

The crayon is the shortest.

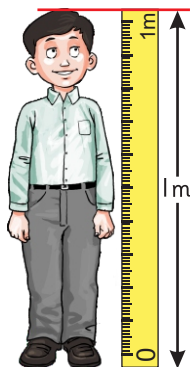
The spoon is the longest.

Learning Check 4.2

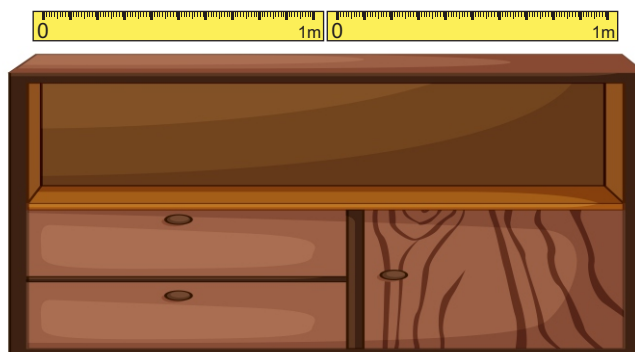
1. Tick (✓) the proper unit to measure the length of the given objects.



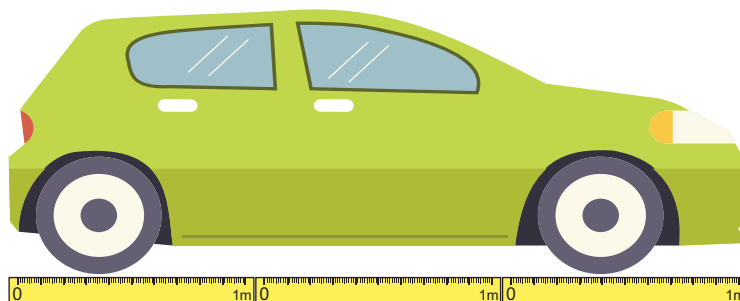
2. Measure and write the length of the given objects.



1 meters tall.

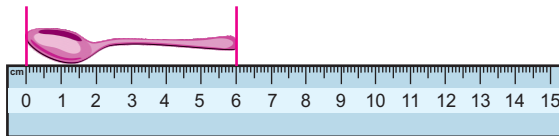


2 meters long.

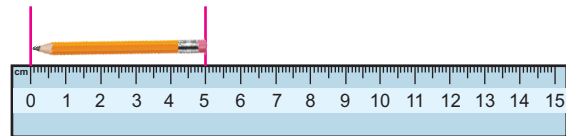


3 meters long.

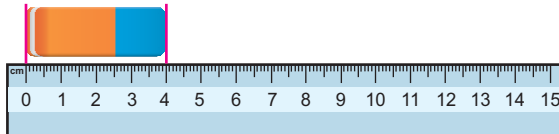
3. Use the given centimeter rulers to measure and write the length of the given objects.



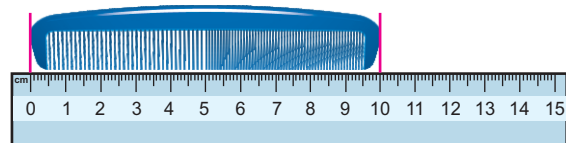
6 cm long.



5 cm long.



4 cm long.



10 cm long.

Learning Check 4.3

1. Solve the following.

a

$$\begin{array}{r} 45 \text{ cm} \\ + 42 \text{ cm} \\ \hline 87 \text{ cm} \end{array}$$

b

$$\begin{array}{r} 55 \text{ cm} \\ + 23 \text{ cm} \\ \hline 78 \text{ cm} \end{array}$$

c

$$\begin{array}{r} 14 \text{ m} \\ + 12 \text{ m} \\ \hline 26 \text{ m} \end{array}$$

d

$$\begin{array}{r} 47 \text{ cm} \\ + 32 \text{ cm} \\ \hline 79 \text{ cm} \end{array}$$

e

$$\begin{array}{r} 27 \text{ m} \\ - 21 \text{ m} \\ \hline 06 \text{ m} \end{array}$$

f

$$\begin{array}{r} 94 \text{ cm} \\ - 22 \text{ cm} \\ \hline 72 \text{ cm} \end{array}$$

g

$$\begin{array}{r} 68 \text{ cm} \\ - 54 \text{ cm} \\ \hline 14 \text{ cm} \end{array}$$

h

$$\begin{array}{r} 79 \text{ m} \\ - 38 \text{ m} \\ \hline 41 \text{ m} \end{array}$$

2. Hina used a 5 m lace for her shirt and a 4 m lace for her scarf.
How much lace did she use altogether?

Lace used for shirt	=	5	m
Lace used for scarf	= +	4	m
Lace used altogether	=	9	m

3. The length of Hadeed's table is 54 cm and that of his chair is 33 cm. How much longer is his table than his chair?

Length of Hadeed's table	=	5	4	cm
Length of Hadeed's chair	= -	3	3	cm
How much longer is the table	=	2	1	cm

So, his table is 21 cm longer than the chair.

4. The length of Madiha's room is 16 m and the length of her sister's room is 15 m. What is the difference in their lengths?

Length of Madeeha's room	=	1	6	m
Length of her sister's room	= -	1	5	m
Difference in lengths	=	0	1	m

So, there is a difference of 1 m in the lengths.

5. Dania used 5 m cloth to stitch her abaya and 4 m cloth to stitch her shirt. How much cloth did she use in all?

Cloth used to stitched abaya	=	5	m
Cloth used to stitched shirt	= +	4	m
Total cloth used in all	=	9	m

Learning Check 4.4

Measure and compare the masses of these objects.



The mass of the crayon box is 4 pebbles.



The mass of the geometry box is 7 pebbles.

The crayons box is lighter than the geometry box.



The mass of the toy cycle is 5 blocks.



The mass of the toy aeroplane is 7 blocks.

The toy aeroplane is heavier than the toy cycle.

Learning Check 4.5

1. What unit will you use to measure the mass of the following objects, kg or g?

Objects

Units



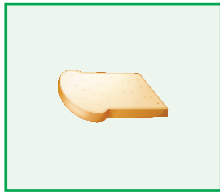
kg

Objects

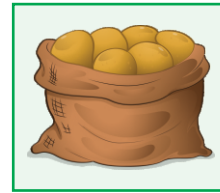
Units



g

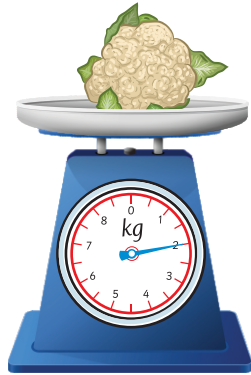


g



kg

2. Write the mass of the given objects.



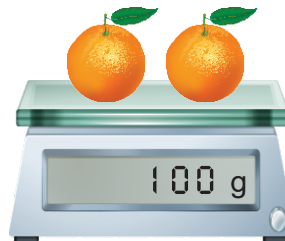
2 kg



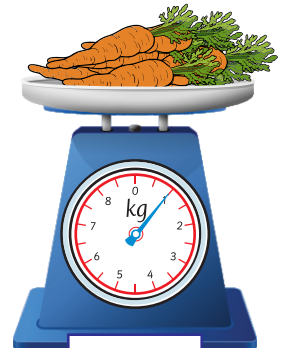
400 g



8 kg



100 g



1 kg



2 kg



5 g



300 g

Learning Check 4.6

1. Solve the following.

a $\begin{array}{r} 54\text{ g} \\ + 34\text{ g} \\ \hline 88\text{ g} \end{array}$	b $\begin{array}{r} 23\text{ kg} \\ + 12\text{ kg} \\ \hline 35\text{ kg} \end{array}$	c $\begin{array}{r} 45\text{ kg} \\ + 30\text{ kg} \\ \hline 75\text{ kg} \end{array}$	d $\begin{array}{r} 71\text{ kg} \\ + 22\text{ kg} \\ \hline 93\text{ kg} \end{array}$
e $\begin{array}{r} 99\text{ g} \\ - 13\text{ g} \\ \hline 86\text{ g} \end{array}$	f $\begin{array}{r} 89\text{ kg} \\ - 31\text{ kg} \\ \hline 58\text{ kg} \end{array}$	g $\begin{array}{r} 75\text{ g} \\ - 54\text{ g} \\ \hline 21\text{ g} \end{array}$	h $\begin{array}{r} 49\text{ kg} \\ - 19\text{ kg} \\ \hline 30\text{ kg} \end{array}$

2. Marwa bought 24 kg of apples and 15 kg of mangoes. Find the total mass of fruit she bought.

Mass of apples bought	=	2	4	kg
Mass of mangoes bought	= +	1	5	kg
Total mass of fruit bought	=	3	9	kg

So, total mass of both is 39 kg.

3. The mass of a packet of potato chips is 35 g and the mass of a packet of cookies is 62 g. Find the total mass of both.

Mass of potato chips	=	3	5	g
Mass of pack of cookies	= +	6	2	g
Total mass	=	9	7	g

So, total mass of both is 97 g.

4. A shopkeeper has 92 kg of sugar in stock. He sold 41 kg of sugar. How much sugar is left?

Mass of sugar stock	=	9	2	kg
Mass of sugar sold	= -	4	1	kg
Mass of sugar left	=	5	1	kg

So, 51 kg of sugar is left.

5. The mass of a packet of dates is 19 kg and the mass of a packet of almonds is 8 kg. Find the difference between their mass.

Mass of packet of dates	=	1	9	kg
Mass of packet of almonds	= -		8	kg
Difference in Mass	=	1	1	kg

So, there is a difference of 11 kg in their mass.

Learning Check 4.7

Compare the capacity of these containers.



The capacity of the pan is 6 cups.



The capacity of the pot is 9 cups.

The capacity of the pot is more than the capacity of the pan.

b)



The capacity of the bottle is 12 glasses

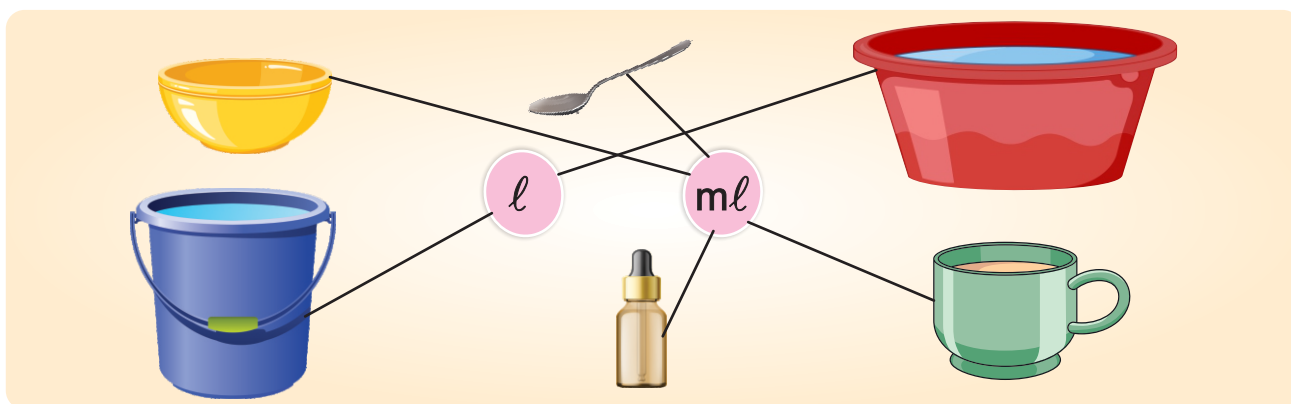


The capacity of thermos is 5 glasses.

The capacity of the thermos is less than the capacity of the bottle.

Learning Check 4.8

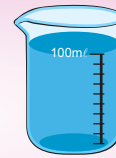
1. Match the containers with the proper unit of their capacity.



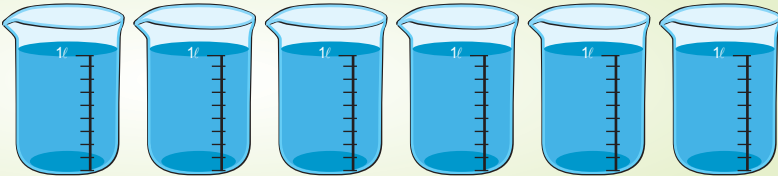
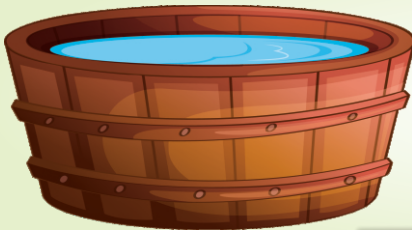
2. Write the capacity of liquid in each container using the correct units.



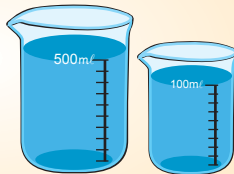
Capacity: 5 liter or 5 l



Capacity: 100 milliliter or 100 ml



Capacity: 6 liter or 6 l



Capacity: 600 milliliter or 600 ml



Capacity: 70 milliliter or 70 ml

Learning Check 4.9

1. Solve the following.

a

$$\begin{array}{r} 16\text{ l} \\ + 10\text{ l} \\ \hline 26\text{ l} \end{array}$$

b

$$\begin{array}{r} 60\text{ l} \\ + 19\text{ l} \\ \hline 79\text{ l} \end{array}$$

c

$$\begin{array}{r} 32\text{ ml} \\ + 43\text{ ml} \\ \hline 75\text{ ml} \end{array}$$

d

$$\begin{array}{r} 54\text{ ml} \\ + 25\text{ ml} \\ \hline 79\text{ ml} \end{array}$$

e

$$\begin{array}{r} 49\text{ l} \\ - 28\text{ l} \\ \hline 21\text{ l} \end{array}$$

f

$$\begin{array}{r} 76\text{ l} \\ - 13\text{ l} \\ \hline 63\text{ l} \end{array}$$

g

$$\begin{array}{r} 88\text{ ml} \\ - 56\text{ ml} \\ \hline 32\text{ ml} \end{array}$$

h

$$\begin{array}{r} 59\text{ ml} \\ - 15\text{ ml} \\ \hline 44\text{ ml} \end{array}$$

2. Adnan filled 24 liters of petrol in his car. He consumed 12 liters of petrol. How much petrol is left?

Petrol filled in car	=	2	4	ℓ
Petrol consumed	= -	1	2	ℓ
Petrol left	=	1	2	ℓ

So, 12 ℓ of petrol is left.

3. The capacity of a tub is 30 liters while the capacity of a bucket is 12 liters. What is their capacity altogether?

Capacity of a tub	=	3	0	ℓ
Capacity of a bucket	= +	1	2	ℓ
Total capacity	=	4	2	ℓ

So, total capacity is 42 ℓ.

4. In a container, there is 54 liters of water. Fahad added 45 liters more water to it. Find the total volume of water in the container.

Volume of water	=	5	4	ℓ
Volume of water added	= +	4	5	ℓ
Total volume of water	=	9	9	ℓ

So, total volume of water is 99 ℓ.

5. Container “A” has 56 liters of oil and container “B” has 22 liters of oil. Which container has more oil and by how much?

Oil in container A	=	5	6	ℓ
Oil in container B	= -	2	2	ℓ
More oil in container A	=	3	4	ℓ

So, container A has 34 ℓ more oil.

Unit Check 4

1. Encircle the correct options.

a) The standard unit for measuring length.

i) g

☒ ii) m

iii) kg

iv) ℓ

b) One of the non-standard units of length.

i) meter

ii) pebble

☒ iii) handspan

iv) jug

c) What do we use a weighing balance to measure?

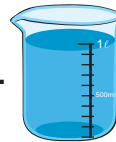
☒ i) mass

ii) length

iii) capacity

iv) width

d) The capacity of this container.



i) 2ℓ

☒ ii) 1ℓ

iii) 500 ml

iv) 250 ml

e) The amount of liquid a container can hold.

i) mass

ii) length

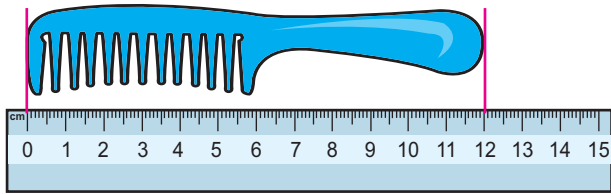
☒ iii) capacity

iv) width

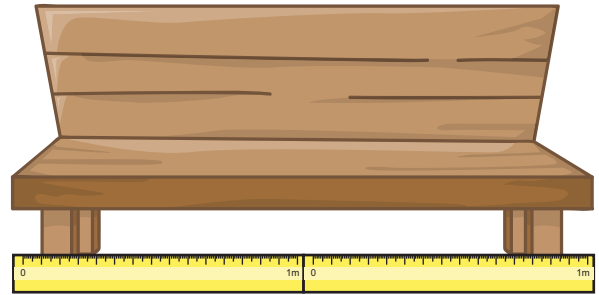
2. Tick (✓) the correct unit of measurement of the given objects.

Objects	Units	
The height of a tree is measured in	m ✓	cm
The length of a book is measured in	m	cm ✓
The mass of an apple is measured in	g ✓	kg
The mass of a sack of rice is measured in	g	kg ✓
The capacity of a spoon is measured in	ℓ	ml ✓
The capacity of a tub is measured in	ℓ ✓	ml
The capacity of a water tank is measured in	ℓ ✓	ml

3. Write the length of the following objects using the correct units.

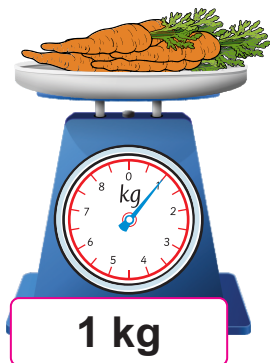


12 cm

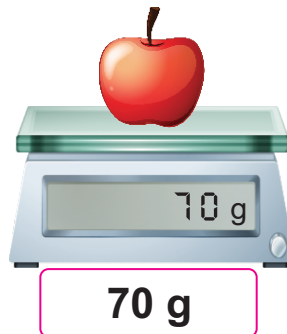


2 m

4. Write the mass of the following objects using the correct units.



1 kg

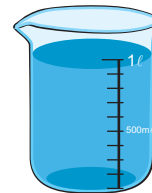
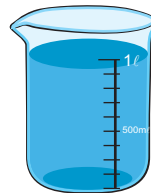
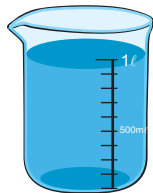


70 g

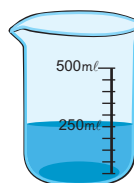


8 kg

5. Write the capacity of the following objects using the correct units.



3 l



250 ml

6. Solve the following.

a

4	2	m
–	1	2 m
3 0 m		

b

7	8	cm
+	2	1 cm
9 9 cm		

c

7	6	kg
–	2	4 kg
5 2 kg		

d

8	5	g
+	1	4 g
9 9 g		

e

5	1	kg
+	3	6 kg
8 7 kg		

f

8	7	m
–	6	5 m
2 2 m		

g

5	7	ℓ
–	4	3 ℓ
1 4 ℓ		

h

5	5	ml
+	1	4 ml
6 9 ml		

7. An iron rod is 24 cm long and another rod is 72 cm long. What is the total length of both rods?

Length of one iron rod	=	2	4	cm
Length of another iron rod	= +	7	2	cm
Total length of both rods	=	9	6	cm

So, total length of both rods is 96 cm.

8. In Ramazan, a shopkeeper sold 67 kg of dates on the first day and 52 kg of dates the second day. How much more dates did he sell on the first day than on the second day?

Mass of dates sold on first day	=	6	7	kg
Mass of dates sold on second day	= –	5	2	kg
More dates sold on first day	=	1	5	kg

So, on first day, 15 kg more dates were sold.

9. An oil container has a capacity of 68 ℓ and another oil container has a capacity of 42 ℓ . Which container has more capacity and by how much more?

Capacity of one oil container	=	6	8	ℓ
Capacity of another oil container	= -	4	2	ℓ
More capacity in first container	=	2	6	ℓ

So, first container has 26 ℓ more capacity.

Unit 5: Time

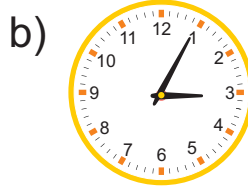
Learning Check 5.1

1. Look at the clocks and write the time. Also write it in words.



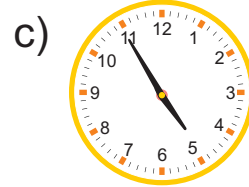
4:15

Four fifteen



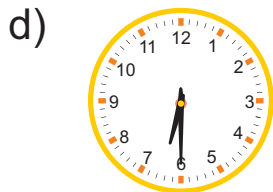
3:05

Three five



4:54

Four fifty four



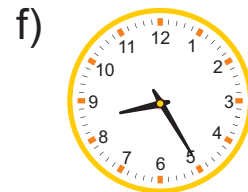
6:30

Six thirty



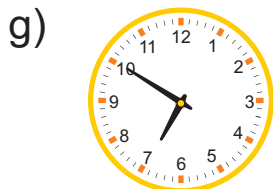
9:20

Nine twenty



8:25

Eight twenty-five



6:50

Six fifty



10:55

Ten fifty-five



11:40

Eleven forty



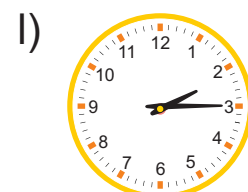
12:10

Twelve ten



11:10

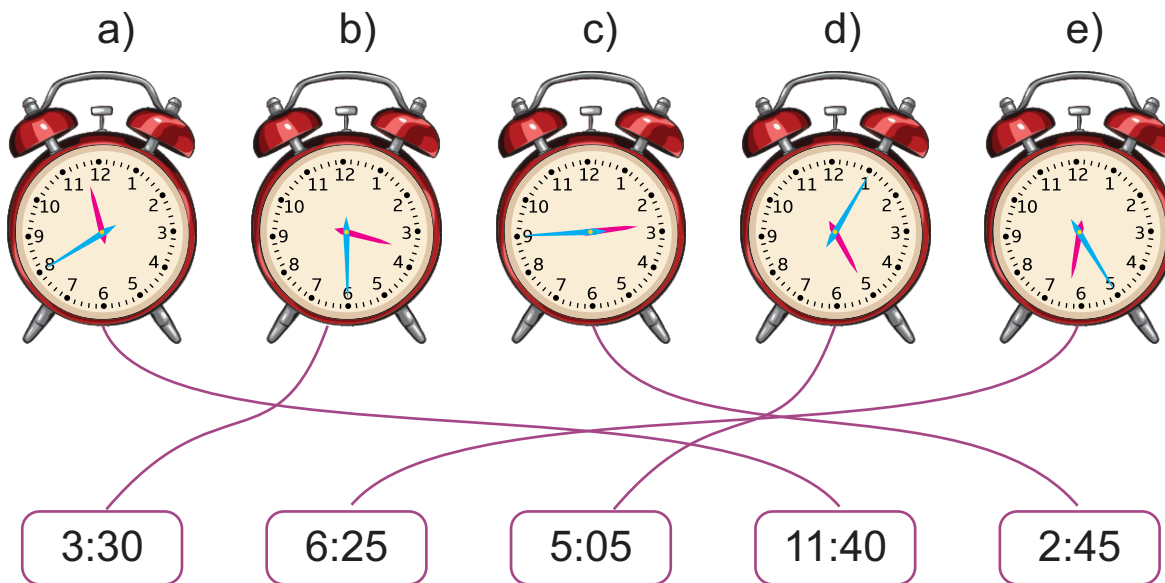
Eleven ten



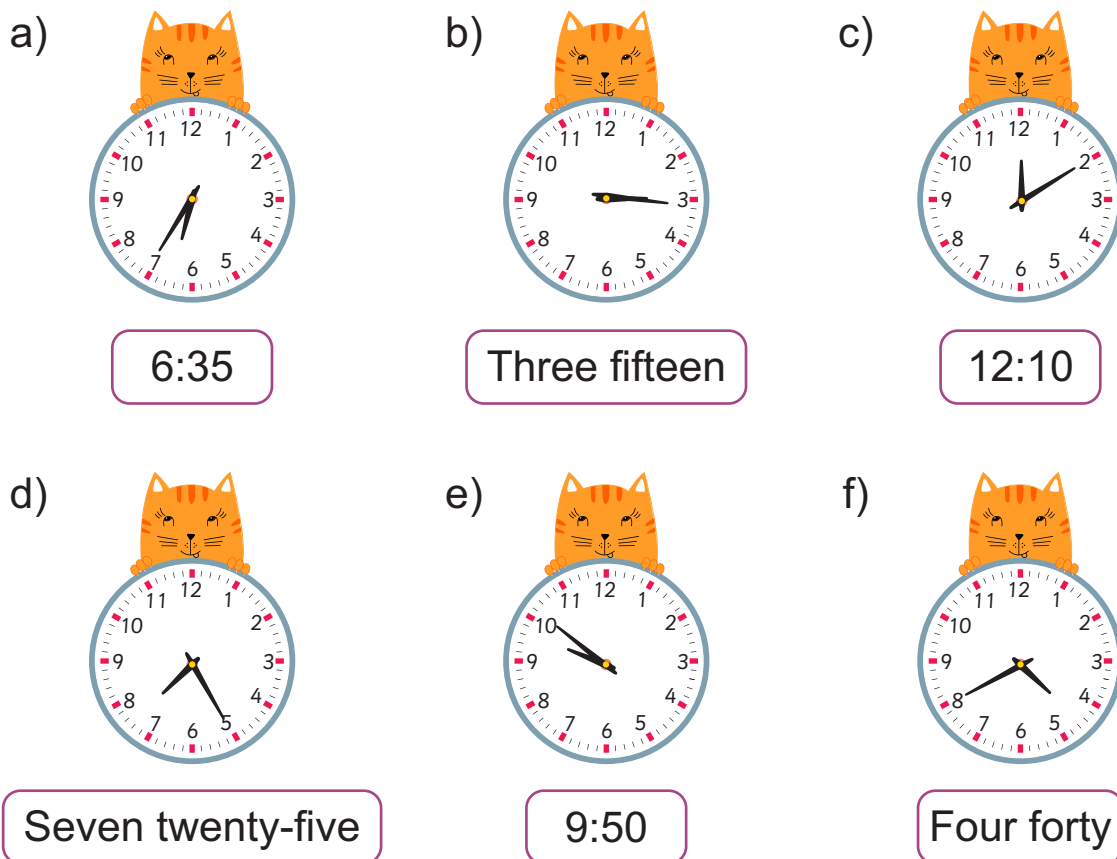
2:15

Two fifteen

2. Match the clocks with their correct time.



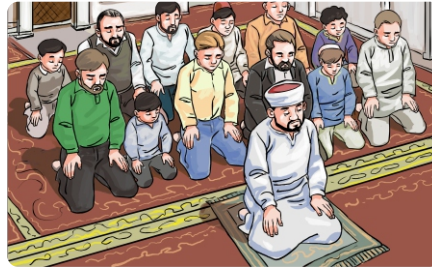
3. Draw hands on the clocks to show the correct time.



Learning Check 5.2

Look at the pictures. Write the correct time using a.m. and p.m. in the given blanks.

- a) Arham is offering Maghrib prayer in the masjid. The time is 7:30 p.m.



- b) Ibrahim is playing during his recess time in school. The time is 11:30 a.m.



- c) Ahad wakes up in the morning. The time is 7:00 a.m.



- d) Marwa is reciting the Holy Quran in the morning. The time is 6:10 a.m.



Learning Check 5.3



By observing the Solar calendar on the previous page, find:

- the 29th of May and circle it red.
- the last Monday of July and circle it blue.
- the 7th of March and circle it green.
- the 2nd Saturday of October and colour it yellow.
- the 20th of November and circle it purple.
- the first Tuesday of January and colour it pink.

Learning Check 5.4

Muharram						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Safar						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Rabi-ul-Awwal						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Rabi-ul-Sani						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29				

Jammadi-ul-Awwal						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Jammadi-ul-Sani						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

Rajab						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
30						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Sha'ban						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

Ramadan						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Shawwal						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

Ziq'ad						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Zil'Hajj						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29						

By observing the Islamic calendar on the previous page, find:

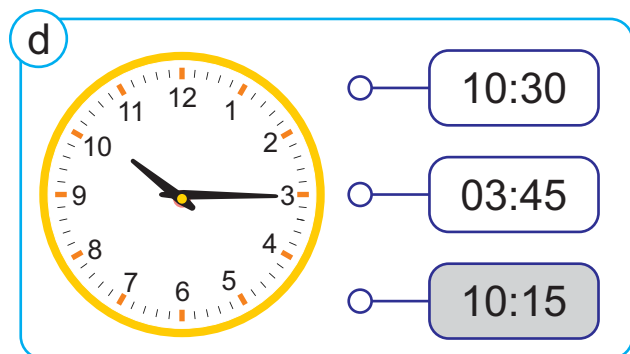
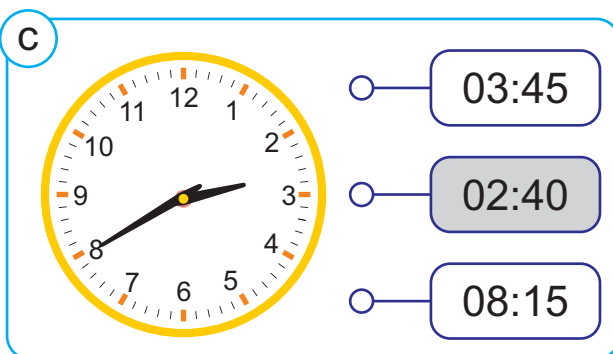
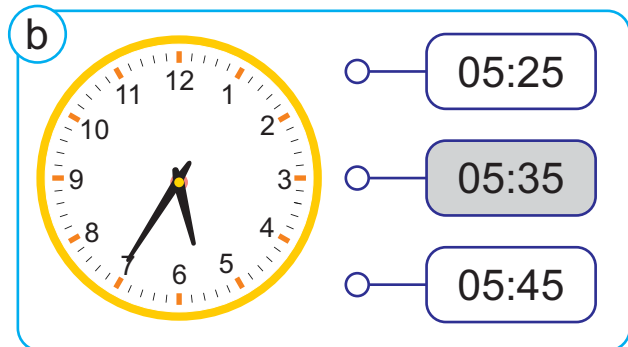
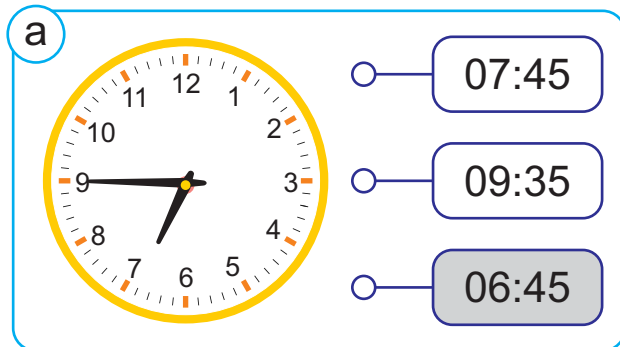
- the 1st of Rajab and circle it red.
- the 4th Friday of Shaaban and circle it blue.
- the 10th of Shawwal and circle it green.
- the 2nd Thursday of Jammadi-ul-Sani and colour it yellow.
- the 27th of Ramadan and circle it purple.
- the first Monday of Ziq'ad and colour it pink.

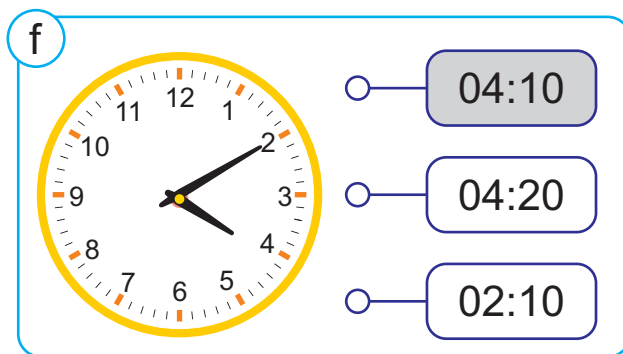
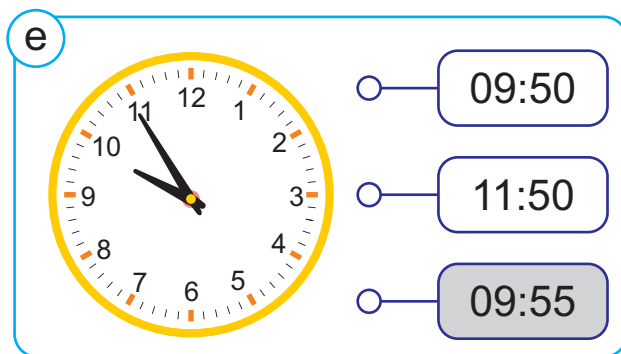
Unit Check 5

1. Encircle the correct options.

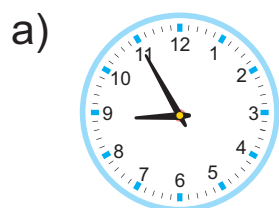
- a) The number of small divisions in an analog clock.
i) 12 ii) 5 ☒ iii) 60 iv) 30
- b) The number of hours in a day.
i) 12 ☒ ii) 24 iii) 60 iv) 6
- c) For which round of time we use a.m.?
☒ i) 12 midnight to 12 noon ii) 12 noon to 12 midnight
iii) 12 midnight to 10 noon iv) 10 noon to 12 midnight
- d) How many minutes are in an hour?
i) 30 ii) 24 iii) 21 ☒ iv) 60
- e) How many rounds in a day does the hour hand complete?
i) 12 ii) 24 ☒ iii) 2 iv) 4

2. Choose and colour the correct time for each of the following clocks.





3. Look at the clocks and write the time in words.



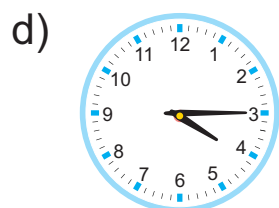
Eight fifty-five



Six thirty-five



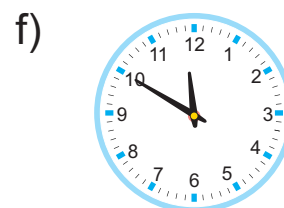
Seven O' clock



Four fifteen

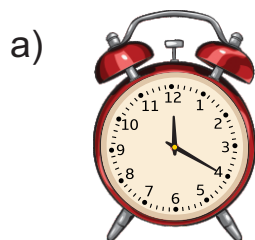


Two twenty

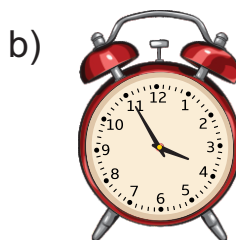


Eleven fifty

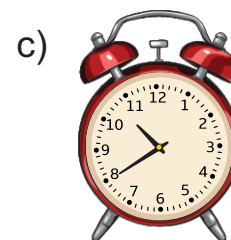
4. Draw the hands of the clocks to show the given times.



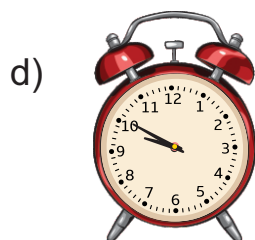
12:20



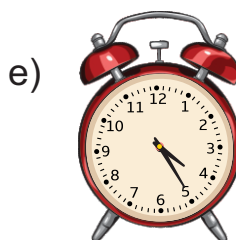
3:55



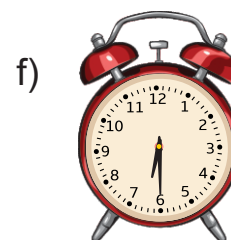
10:40



Nine fifty



Four twenty-five



Six thirty

a) the 30th of June and circle it red.

b) the 4th Saturday of October and circle it blue.

c) the 5th of November and circle it green.

7. By observing the Islamic calendar, find:

Muharram						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Safar						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Rabi-ul-Awwal						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Rabi-ul-Sani						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29				

Jammadi-ul-Awwal						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Jammadi-ul-Sani						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

Rajab						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
30						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Sha'ban						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

Ramadan						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Shawwal						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

Ziq'ad						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Zil'Hajj						
Sun	Mon	Tue	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29						

a) the 3rd Friday of Shaaban and colour it yellow.

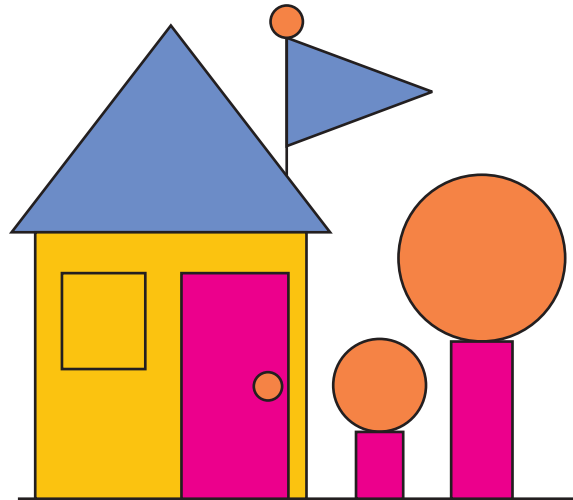
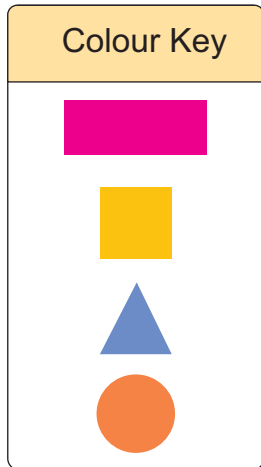
b) the 1st of Ramadan and circle it with purple.

c) the first Tuesday of Zil'Hajj and colour it pink.

Unit 6: Geometry

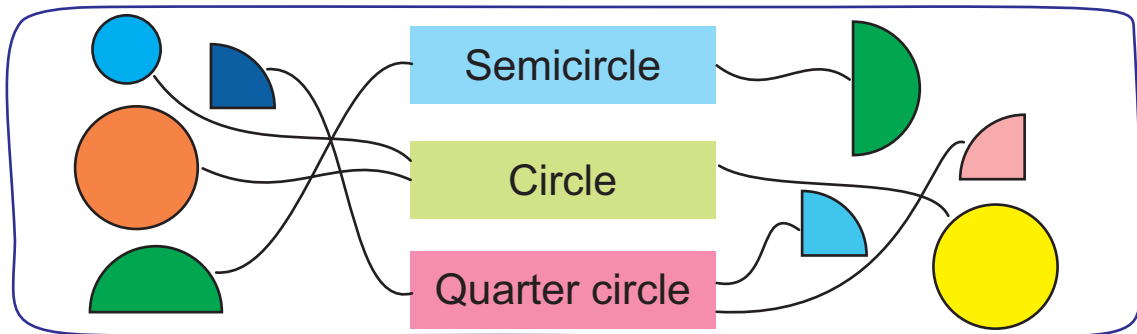
Learning Check 6.1

Colour the picture by using the colour key.

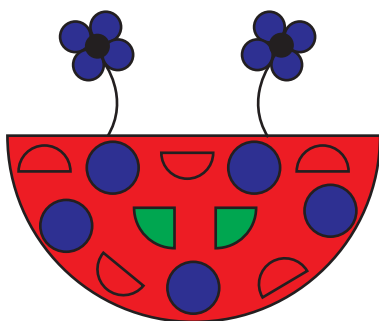


Learning Check 6.2

1. Match the shapes with their correct names.

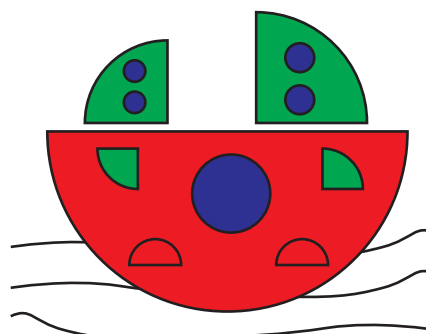


2. Colour the circles blue, the semicircles red and the quarter circles green. Also write the number of each shape.

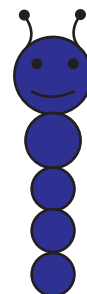


How many circles? 23

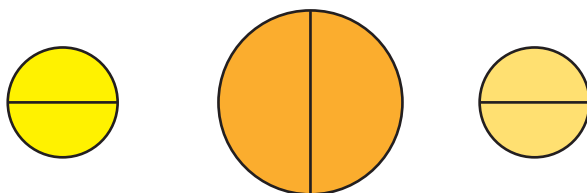
How many quarter circles? 6



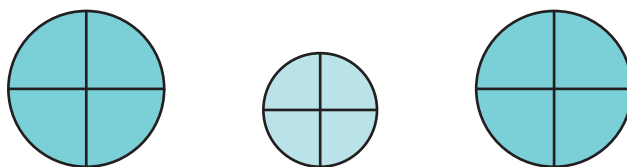
How many semicircles? 9



3. Draw lines to divide these circles into semicircles.



4. Draw lines to divide these circles into quarter circles.



Learning Check 6.3

1. Colour the correct number of sides and vertices for each shape.



2 sides and 4
vertices

4 sides and 4
vertices

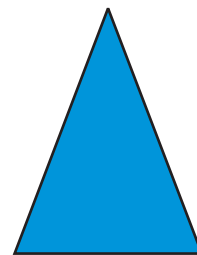
4 sides and 3
vertices



4 sides and 4
vertices

3 sides and 4
vertices

4 sides and 3
vertices



2 sides and 3
vertices

3 sides and 3
vertices

4 sides and 3
vertices

2. Draw the correct shapes. Also name them.

a

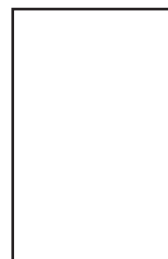
I have 4 sides
and 4 vertices.
All of my sides
are equal in
length.



Square

b

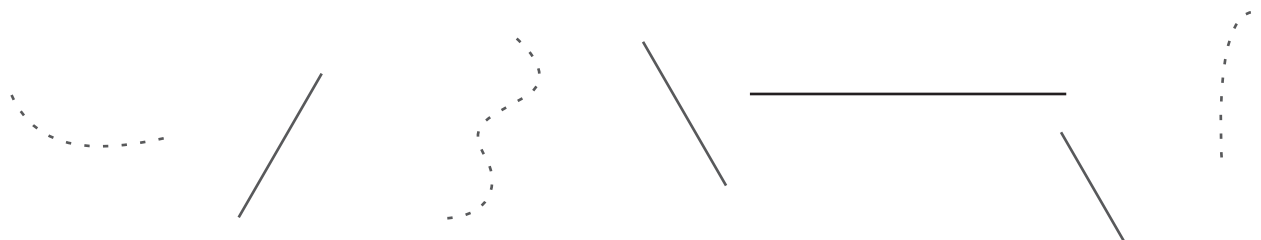
I have 4 sides
and 4 vertices.
2 of my sides
are short and
2 are long.



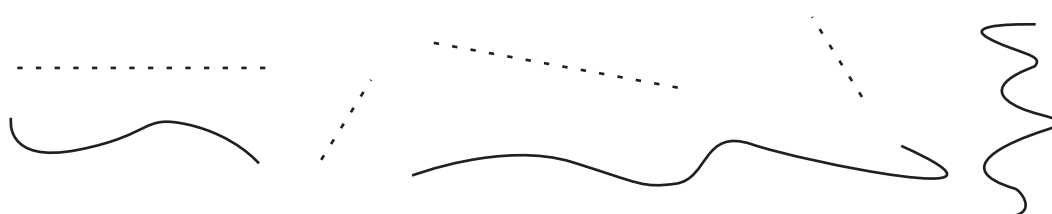
Rectangle

Learning Check 6.4

1. Trace all the straight lines.



2. Trace all the curves.



3. Write the number of straight lines and curves of these shapes.

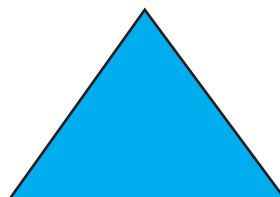
a)



4 Straight lines

0 Curves

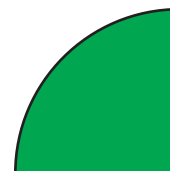
b)



3 Straight lines

0 Curves

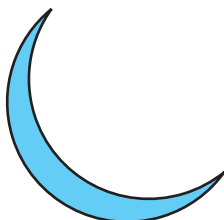
c)



2 Straight lines

1 Curves

d)



0 Straight lines

2 Curves

e)



10 Straight lines

0 Curves

f)

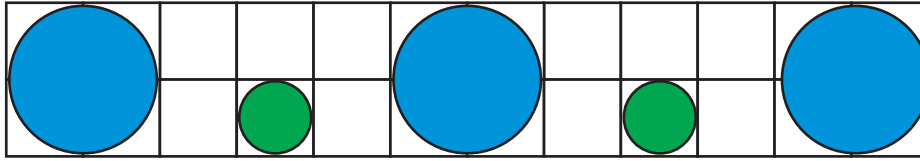


1 Straight lines

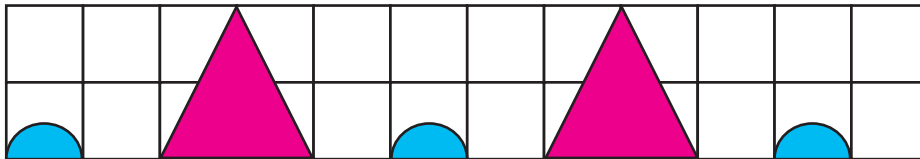
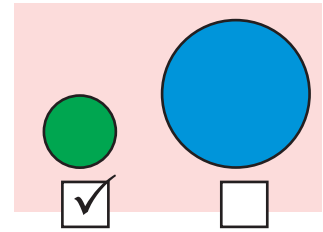
1 Curves

Learning Check 6.6

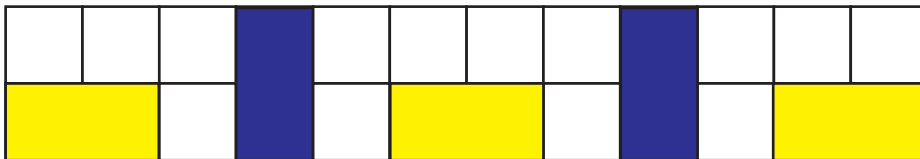
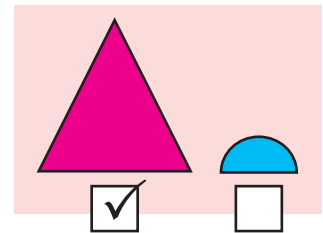
Tick (✓) which of the following will be next.



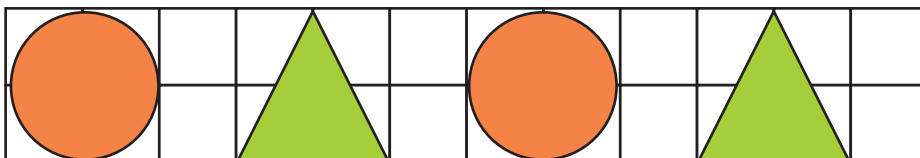
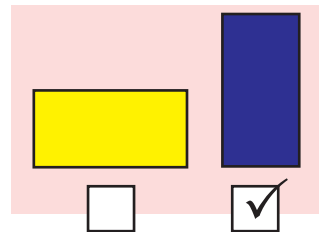
Patterns with change in colour and size.



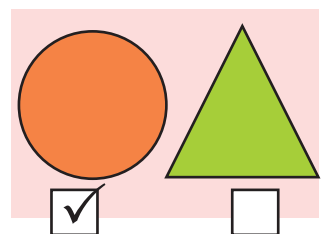
Patterns with change in Shape and size.



Patterns with change in colour and direction.

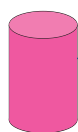
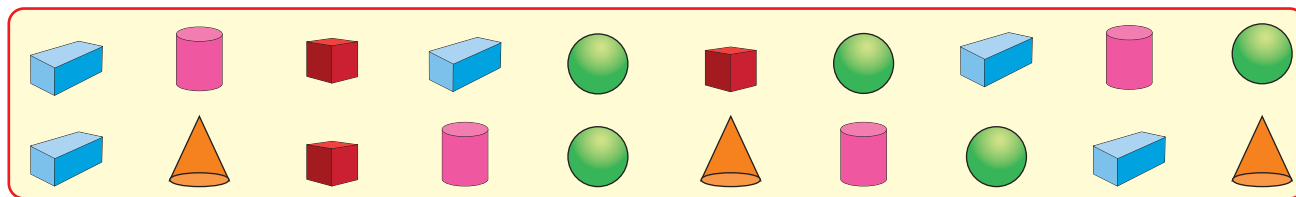


Patterns with change in Shape and colour.



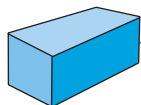
Learning Check 6.7

Name the shapes. Then count each type of shape and write how many.



Name: Cylinder

How many? 4



Name: Cuboid

How many? 5



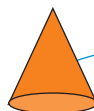
Name: Sphere

How many? 5



Name: Cube

How many? 3



Name: Cone

How many? 3

Unit Check 6

1. Encircle the correct options.

a) The _____ of a circle is called a semicircle.

i) full

(ii) half

iii) third

iv) fourth

b) A _____ has 3 sides and 3 corners.

i) semicircle

ii) square

iii) rectangle

(iv) triangle

c) A straight line is the _____ line joining any two points.

i) longest

(ii) shortest

iii) tallest

iv) highest

d) There are _____ quarter circles in a circle.

i) 1

ii) 2

iii) 3

(iv) 4

e) Which of these letters has only straight lines and no curves?

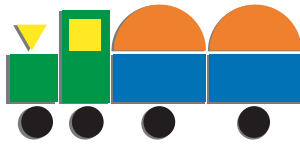
i) B

(ii) K

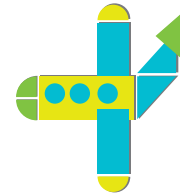
iii) D

iv) P

2. Name the shapes and the number of shapes used in each of the given figures.

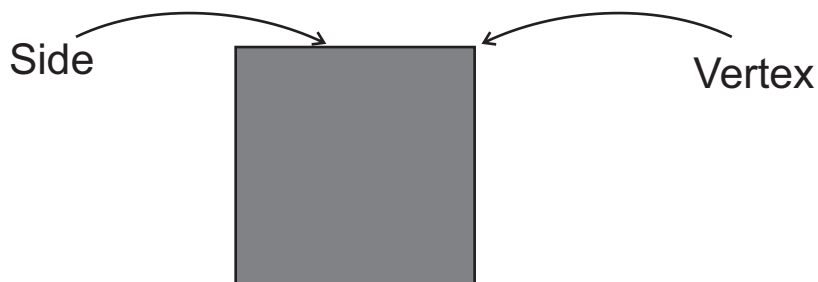


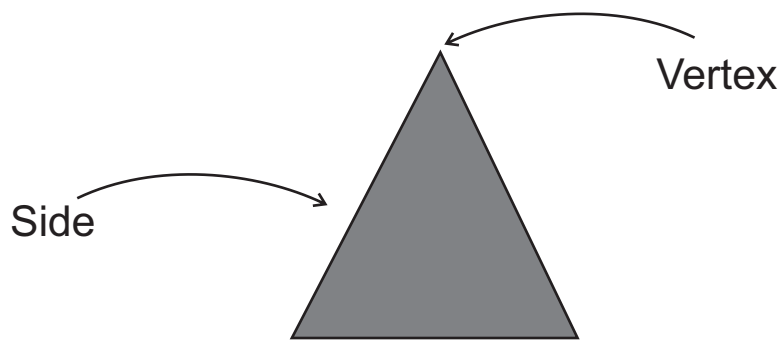
Name of shape	How many?
Semicircle	2
Circles	4
Square	2
Rectangle	3
Triangle	1



Name of shape	How many?
Semicircle	2
Circles	3
Square	0
Rectangle	3
Triangle	3
Quarter circle	2

3. Draw a square, a triangle and a rectangle. Label the vertices and the sides of each.





4. Write the number of straight lines and curves of these shapes.



4 Straight lines
0 Curves



2 Straight lines
1 Curves



7 Straight lines
0 Curves

9. Colour the shapes according to the given colour key.

Cubes:  Spheres:  Cylinders:  Cones:  Cuboids: 

