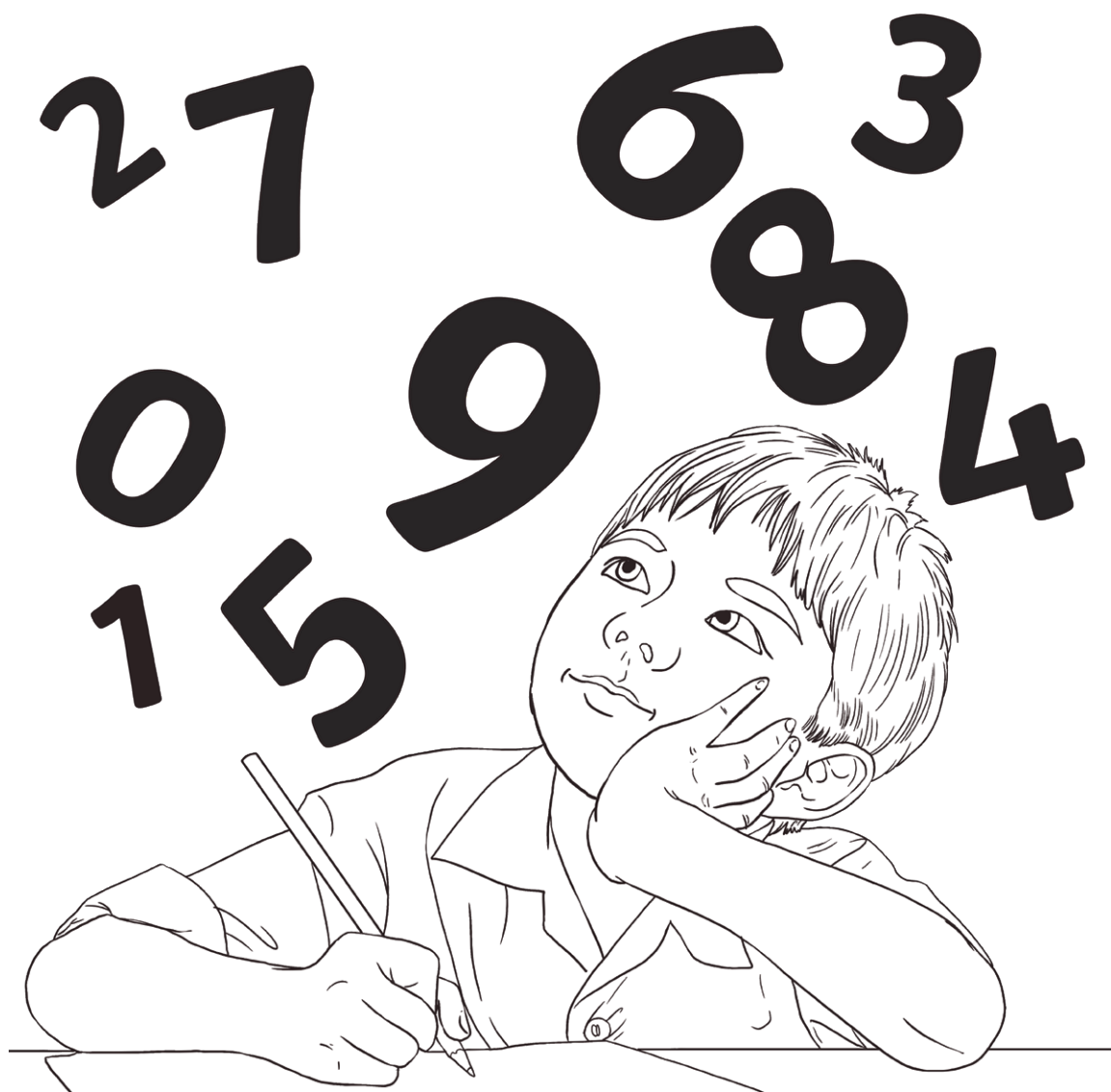


Maths Activity Booklet **Answers**



Number and Place Value Answers

1. Continue these number sequences:

9, 18, 27, 36, 45, **54, 63, 72, 81, 90, 99, 108**

775, 750, 725, 700, **675, 650, 625, 600, 575**

5, 4, 3, 2, **1, 0, -1, -2, -3, -4, -5**

2. Find 100 less than these numbers:

3912 **3812**

9201 **9101**

1083 **983**

3. Find 1000 less than these numbers:

59 003 **58 003**

17 351 **16 351**

20 882 **19 882**

4. What is the value of the underlined digit in each number?

1846 **8 hundreds**

2004 **2 thousands**

1589 **9 ones**

5. Put these numbers in order from smallest to largest.

10 111

11 011

10 011

11 110

11 101

Smallest

Largest

10 011

10 111

11 011

11 101

11 110

6. Compare these numbers using <, > or =.

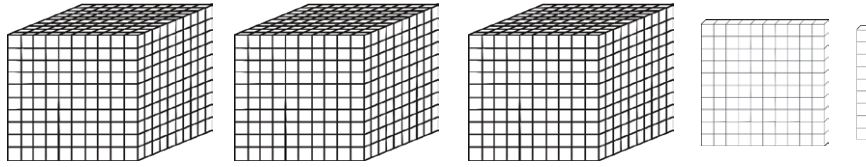
454 544

660 606

2 tens 4 ones 24 ones

Representing Number Answers

1. What number is shown below? **3109**



2. Complete the table, showing the numbers in numerals and words.

2109	Two thousand, one hundred and nine.
1293	One thousand, two hundred and ninety-three.
29 431	Twenty-nine thousand, four hundred and thirty-one.
75 098	Seventy-five thousand and ninety-eight.

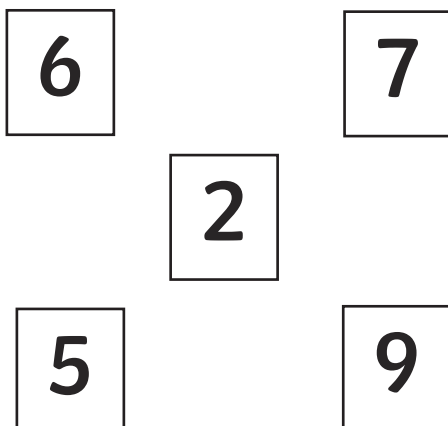
3. Use the information in the table to work out the value of these Roman numerals.

LXXII = **72**

XIV = **14**

CCLIX = **259**

Roman	Numeral
I	1
V	5
X	10
L	50
C	100



a) What is the largest number that can be made from these digit cards? **97 652**

b) What is the smallest number that can be made from these digit cards? **25 679**

Addition and Subtraction Answers

1. Complete these calculations mentally:

$$421 + 50 = \mathbf{471}$$

$$376 + 200 = \mathbf{576}$$

$$250 - 99 = \mathbf{151}$$

2. Complete these calculations:

$$\begin{array}{r} 1\ 3\ 5\ 7 \\ +\ 2\ 6\ 4\ 1 \\ \hline \mathbf{3\ 9\ 9\ 8} \end{array}$$

$$\begin{array}{r} 3\ 5\ 9\ 2 \\ +\ 4\ 2\ 3\ 8 \\ \hline \mathbf{7\ 8\ 3\ 0} \\ \mathbf{1\ 1} \end{array}$$

$$\begin{array}{r} 7\ 9\ 8\ 5 \\ -\ 1\ 3\ 4\ 2 \\ \hline \mathbf{6\ 6\ 4\ 3} \end{array}$$

$$\begin{array}{r} 5\ \overset{2}{\cancel{3}}\ \overset{1}{1}\ 9 \\ -\ 3\ 2\ 6\ 7 \\ \hline \mathbf{2\ 0\ 5\ 2} \end{array}$$

3. Complete these calculations:

$$3410 + \mathbf{2245} = 5655$$

$$6720 - \mathbf{1500} = 5220$$

4. Use appropriate calculations to solve these problems.

a) At a cinema, there is room for 750 people in a screen. If the cinema sells 641 tickets for a screen, how many are left?

$$\mathbf{750 - 641 = 109}$$

b) In one day, 2345 people visit the cinema. 1032 of them go and see an action film and the others go and see a comedy. How many people went to see the comedy?

$$\mathbf{2345 - 1032 = 1313\ people}$$

Multiplication and Division Answers

1. Fill in the missing numbers in the multiplication square.

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

2. Explain the pattern of the 9 times table.

The tens column increases by 1 each time and the ones column decreases by 1 at a time. Also, when the digits are added together they equal 9 (with the exception of 99).

3. Complete these calculations:

$$250 \times 4 = \mathbf{1000}$$

$$555 \times 100 = \mathbf{55\ 500}$$

$$2540 \times 0 = \mathbf{0}$$

4. Use your knowledge of multiplication and division methods to solve these problems.

a) A box of glue sticks contains 128 glue sticks. There are 4 classes in the school. How many glue sticks does each class get?

32 glue sticks.

b) To make a model, each child needs 8 lolly sticks. If lolly sticks come in packs of 30, how many packs would be needed for 28 children to make a model?

224 lolly sticks are needed in total, so 8 packets are needed ($8 \times 30 = 240$)

5. Use formal methods to complete these calculations.

a) $45 \times 6 = \mathbf{270}$

b) $333 \div 9 = \mathbf{37}$

6. If we know that $12 \times 13 = 156$, what other calculations do we know? Write them below.

$13 \times 12 = 156$, $156 \div 12 = 13$, $156 \div 13 = 12$

7. Fill in the missing numbers.

$$\boxed{11} \times 12 = 132$$

$$125 \div \boxed{25} = 5$$

$$8 \times \boxed{15} = 120$$

$$\boxed{350} \div 7 = 50$$

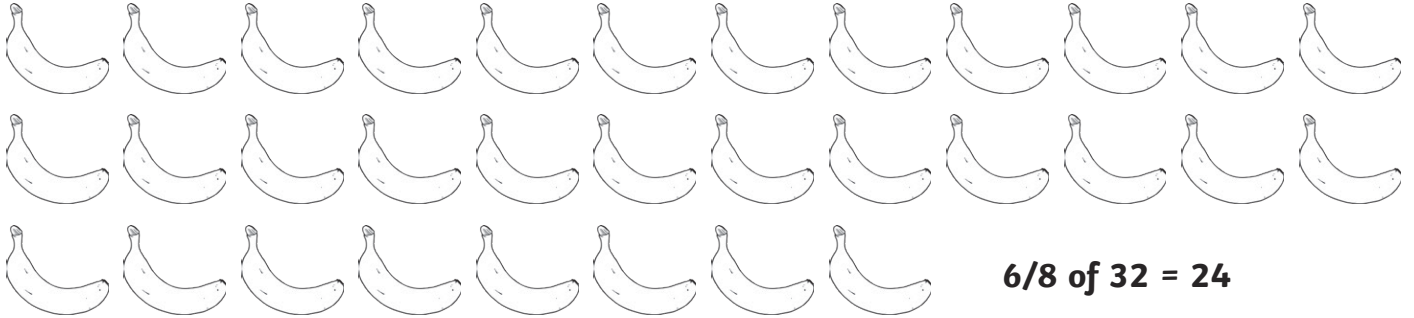
Fractions Answers

1. Continue the number sequences.

$\frac{2}{10}, \frac{3}{10}, \frac{4}{10}, \frac{5}{10}, \frac{6}{10}, \frac{7}{10}, \frac{8}{10}, \frac{9}{10}, \frac{10}{10}$

$\frac{56}{100}, \frac{54}{100}, \frac{52}{100}, \frac{50}{100}, \frac{48}{100}, \frac{46}{100}, \frac{44}{100}, \frac{42}{100}$

2. Find $\frac{6}{8}$ of these bananas.



$$6/8 \text{ of } 32 = 24$$

3. a) What fraction of the shape is shaded? $\frac{4}{6}$



b) Write 2 equivalent fractions to the amount shaded.

Accept $\frac{2}{3}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15}, \frac{20}{30}, \frac{40}{60}, \frac{400}{600}$ **or any other correct equivalent fraction.**

4. Use the fraction wall to help you answer these questions.

1											
$\frac{1}{3}$				$\frac{1}{3}$				$\frac{1}{3}$			
$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$	
$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$
$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{24}$

a) How many sixths are equivalent to $\frac{2}{3}$? $\frac{4}{6}$

b) How many twelfths are equivalent to $\frac{6}{24}$? $\frac{3}{12}$

c) How many twenty-fourths are equivalent to $\frac{5}{6}$? $\frac{20}{24}$

d) Would you rather have $\frac{7}{12}$ or $\frac{15}{24}$ of a cake? Why? **Pupils' own responses, showing understanding that $\frac{15}{24}$ is a larger fraction than $\frac{7}{12}$.**

5. Complete these calculations:

$$\frac{1}{10} + \frac{3}{10} = \frac{4}{10} = \frac{2}{5}$$

$$\frac{3}{8} + \frac{4}{8} = \frac{7}{8}$$

$$\frac{7}{9} - \frac{2}{9} = \frac{5}{9}$$

$$\frac{4}{6} - \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$$

Put these fractions in order from smallest to largest.

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

$$\frac{2}{3}$$

$$\frac{1}{10}$$

$$\frac{2}{8}$$

$$\frac{5}{6}$$

Smallest

Largest

$$\frac{1}{10}$$

$$\frac{2}{8}$$

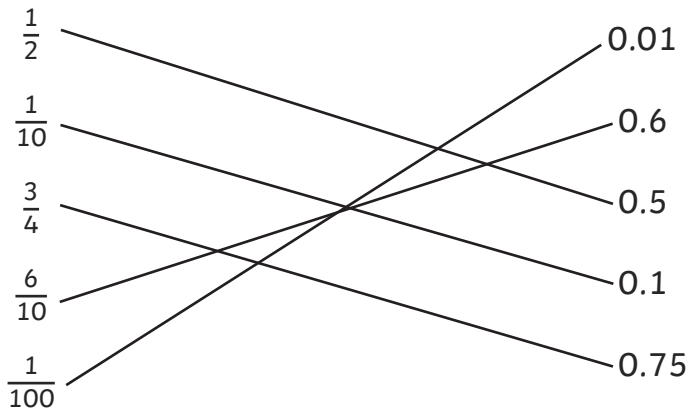
$$\frac{3}{6}$$

$$\frac{2}{3}$$

$$\frac{5}{6}$$

Fractions and Decimals Answers

1. Match the decimal to its equivalent fraction.



2. Complete the table. One has been done for you.

	$\div 10$	$\div 100$
13	1.3	0.13
42	4.2	0.42
68	6.8	0.68
3	0.3	0.03

3. Round these decimals to the nearest **whole** number.

1.2 **1**
 5.6 **6**
 2.21 **2**
 3.5 **4**
 1.55 **2**

4. Compare these decimals using $<$, $>$ or $=$.

0.5 $\boxed{>}$ 0.05

1.02 $\boxed{=}$ 1.020

3.75 $\boxed{<}$ 3.775

Measurement Answers

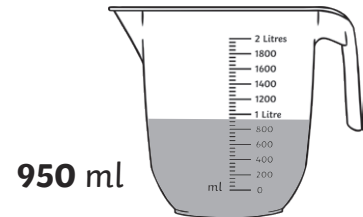
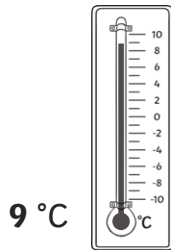
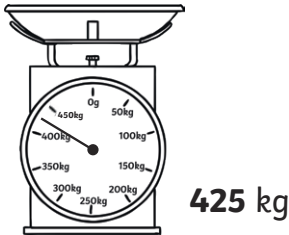
1. a) Measure this line using a ruler. Write its length in cm and in mm.

 = **The line measures 8.5cm or 85mm.**

- b) Use a ruler to draw a line that measures 53mm.

Accept straight lines drawn to exactly 53mm.

2. Write the amount shown on each scale.



3. Convert these units.

a) 1500g = **1.5** kg

d) 12.5cm = **125** mm

b) 2450g = **2.45** kg

e) 1.2km = **1200** m

c) 1.75m = **175** cm

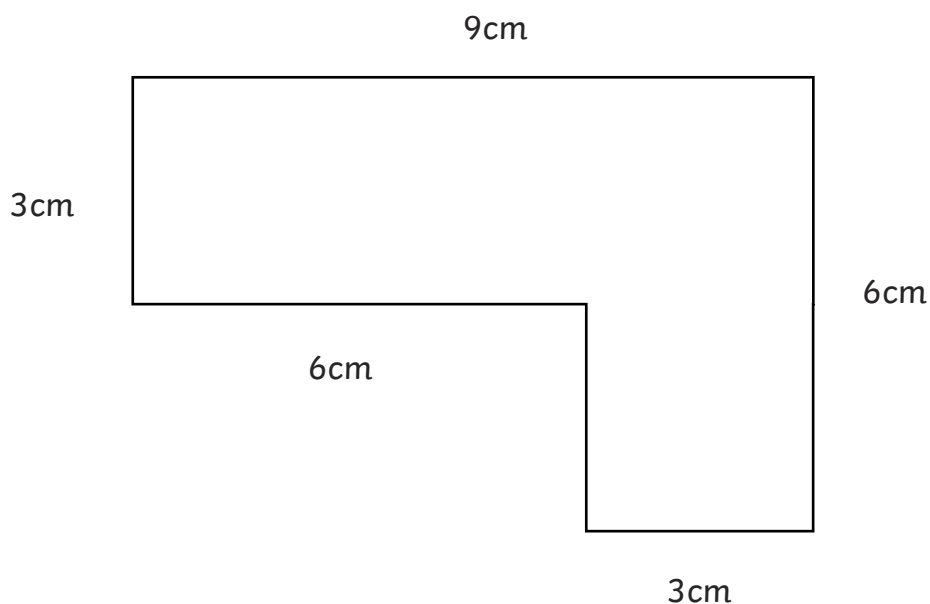
f) 2300ml = **2.3** l

4. Anna says five 750ml bottles will hold more than three 1l bottles. Is she right? Explain how you know.

Anna is correct as five 750ml bottles will hold 3750ml in total, which is 3.75l. Three 1l bottles will hold 3l in total, which is 3000ml. So the five bottles will hold more.

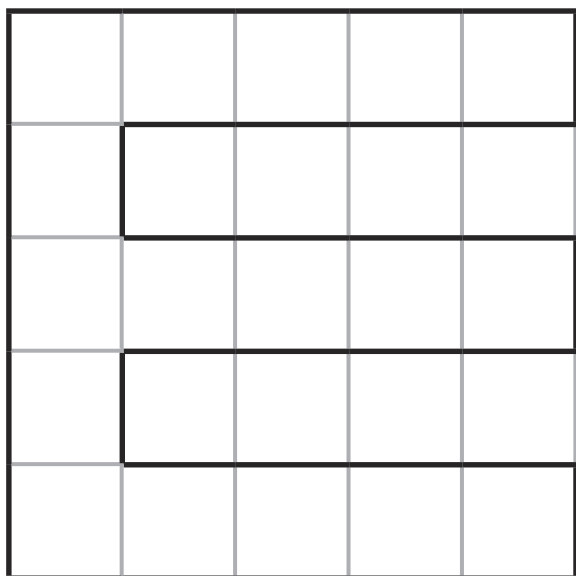
Area and Perimeter Answers

1. Calculate the perimeter of this shape.



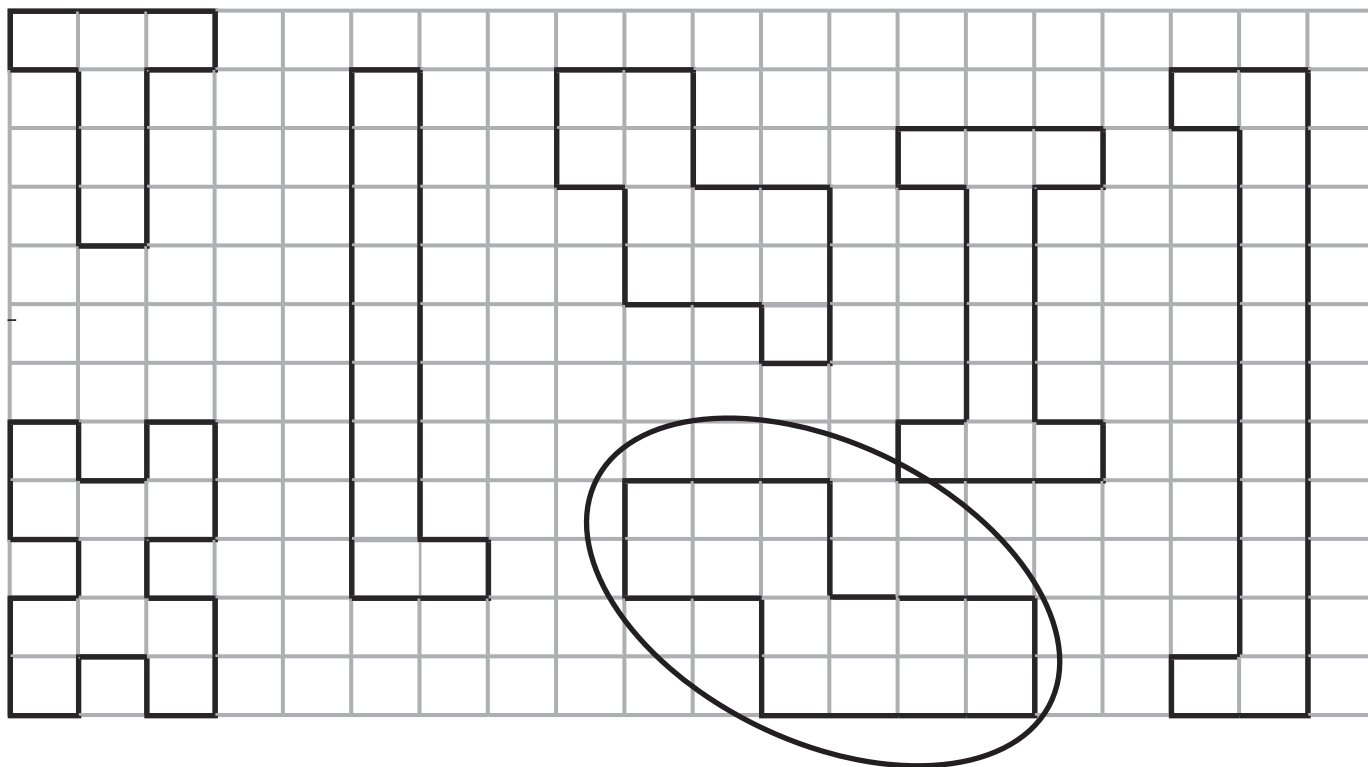
Perimeter = **30 cm**

2. What is the area of this shape?



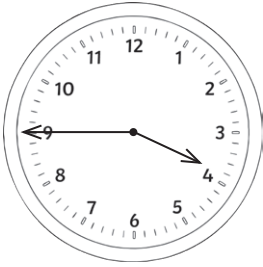
Area = **17 cm²**

3. Which of these shapes has the largest area?

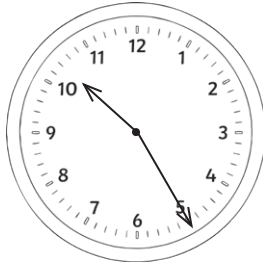


Time Answers

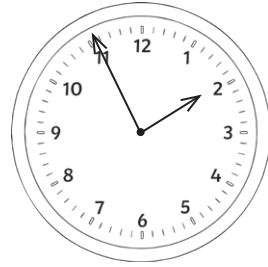
1. Write the time these clocks show.



3:45 or quarter to 4

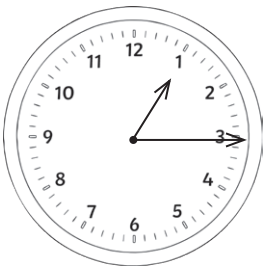


10:25 or twenty-five past 10

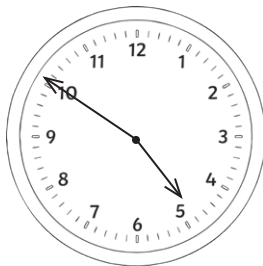


1:55 or five to 2

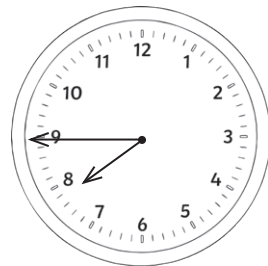
2. Draw the hands to show the given time on each clock.



1:15 or quarter past 1



4:50 or ten to 5



7:45 or quarter to 8

3. A film lasts for 165 minutes. How long is the film in minutes and hours?

2 hours 45 minutes

4. Complete the sentences.

There are **60** seconds in 1 minute.

There are **60** minutes in 1 hour.

There are **24** hours in 1 day.

There are **7** days in 1 week.

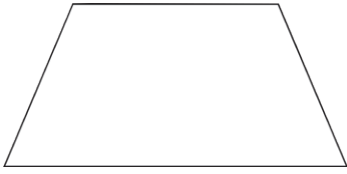
There are **365** days in 1 year.

There are **12** months in 1 year.

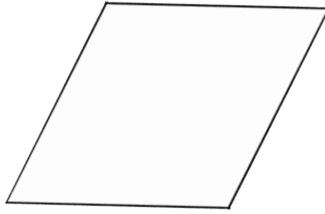
5. How many days are in June? **30 days**

Shape Answers

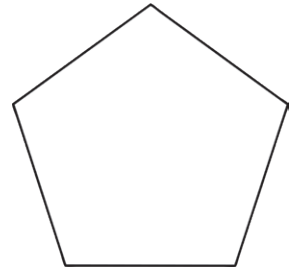
1. Name these 2D shapes.



trapezium



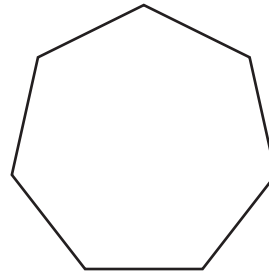
rhombus



pentagon

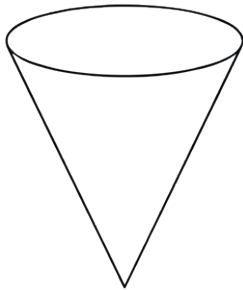


parallelogram

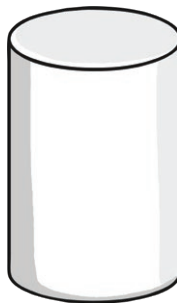


heptagon

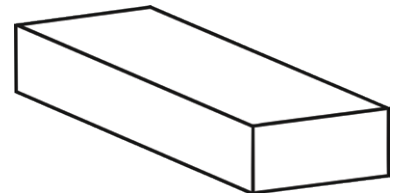
2. Name these 3D shapes.



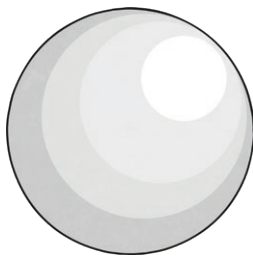
cone



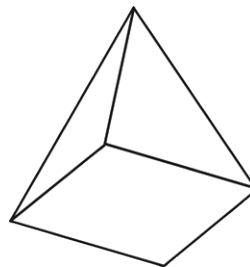
cylinder



**rectangular prism
OR cuboid**



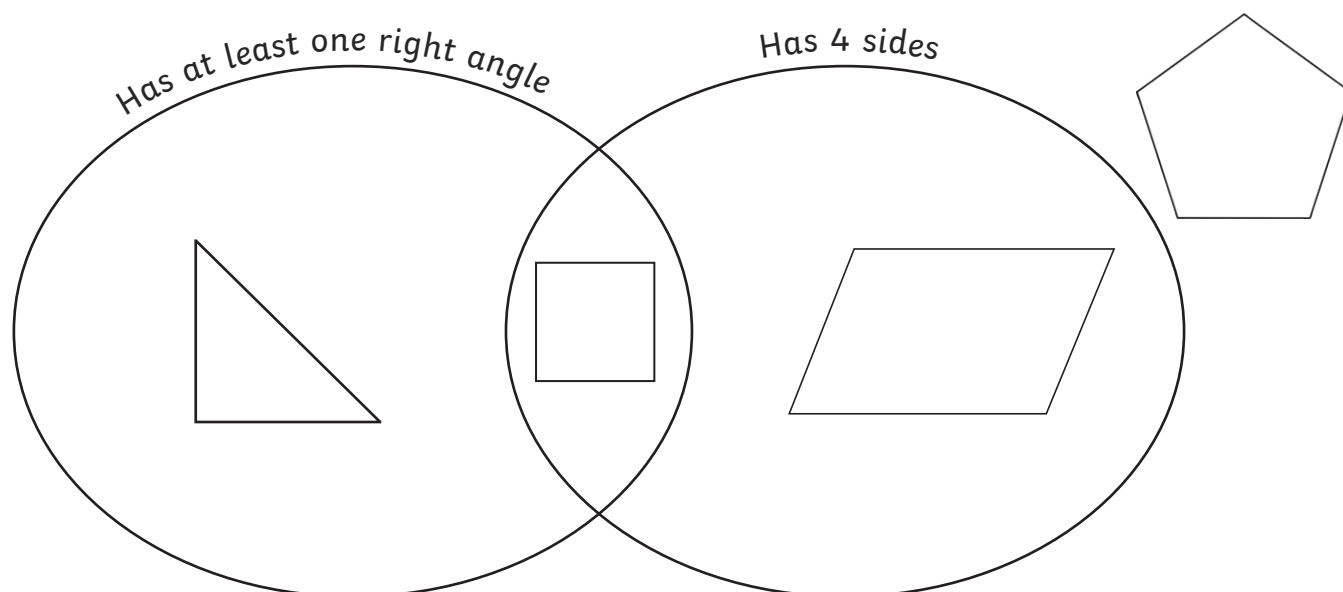
sphere



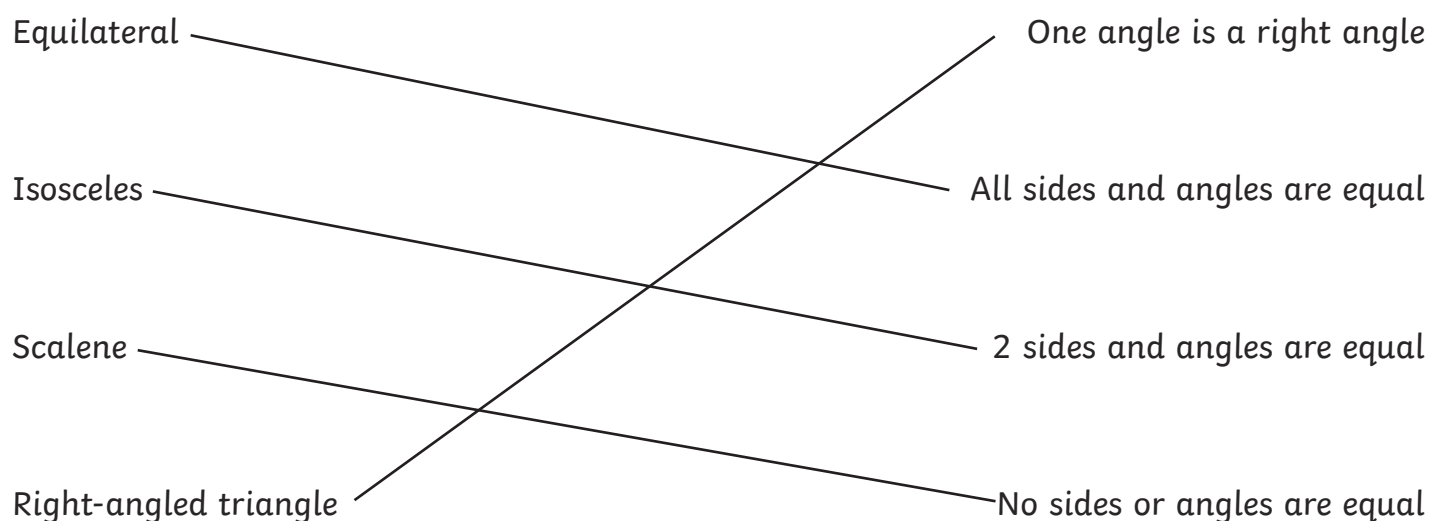
square-based pyramid

3. Draw the following shapes in the correct places on the Venn diagram.

- square
- right angled triangle
- pentagon
- parallelogram



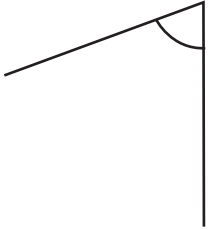
4. Match the type of triangle to its definition.



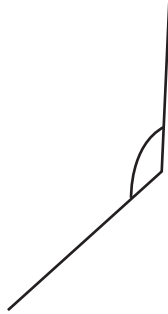
Angles Answers

1. Order these angles from smallest to largest.

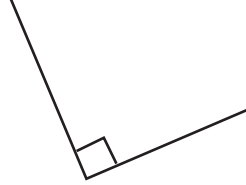
A



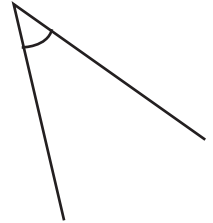
B



C

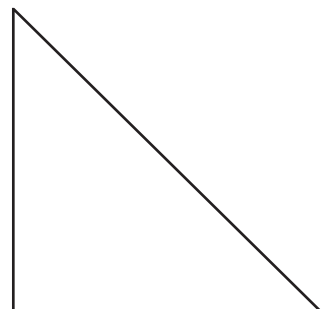
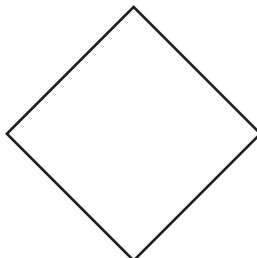
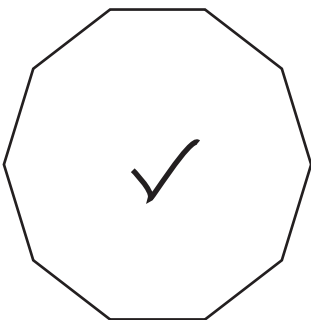
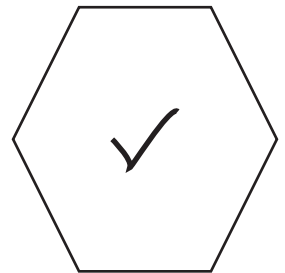
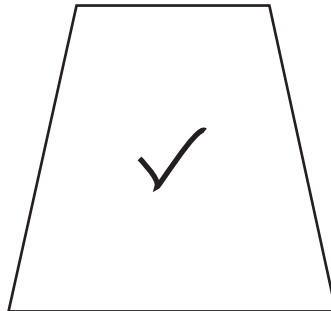


D



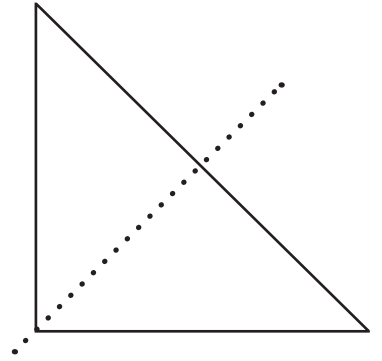
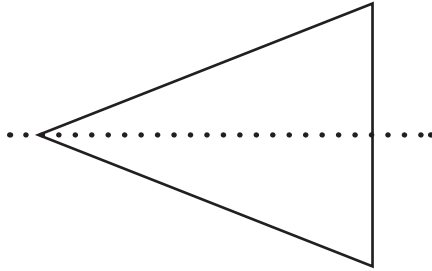
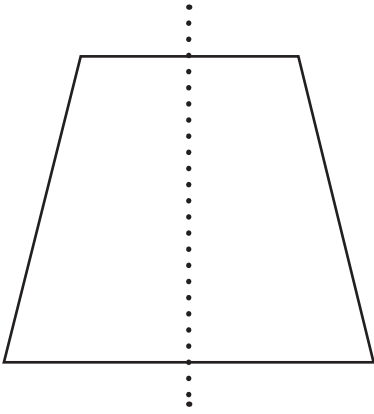
D, A, C, B

2. Tick all the shapes that have **obtuse** angles.

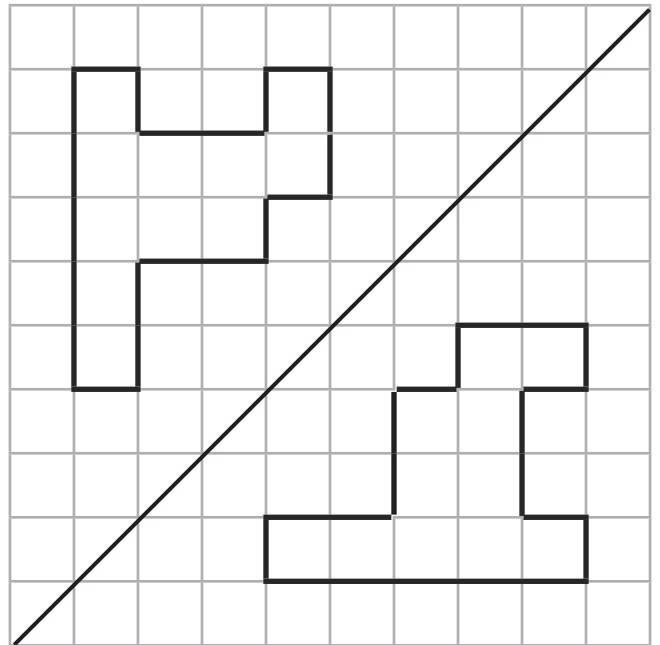
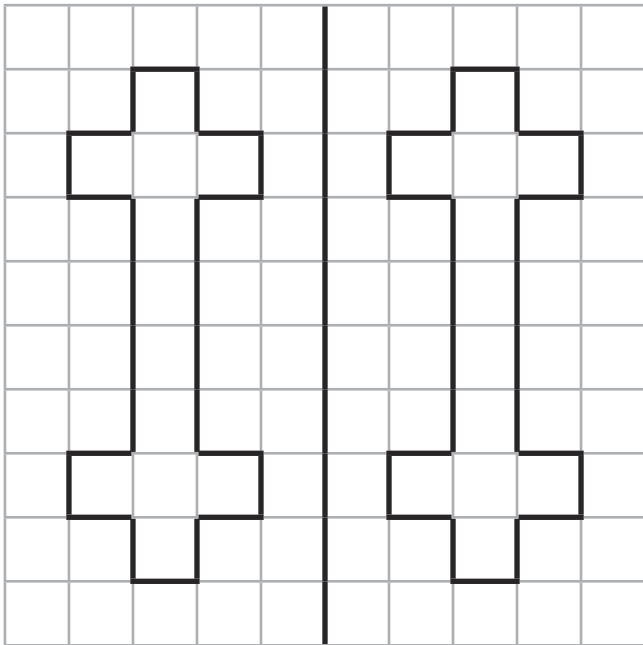


Symmetry Answers

1. Draw a line of symmetry on these shapes.

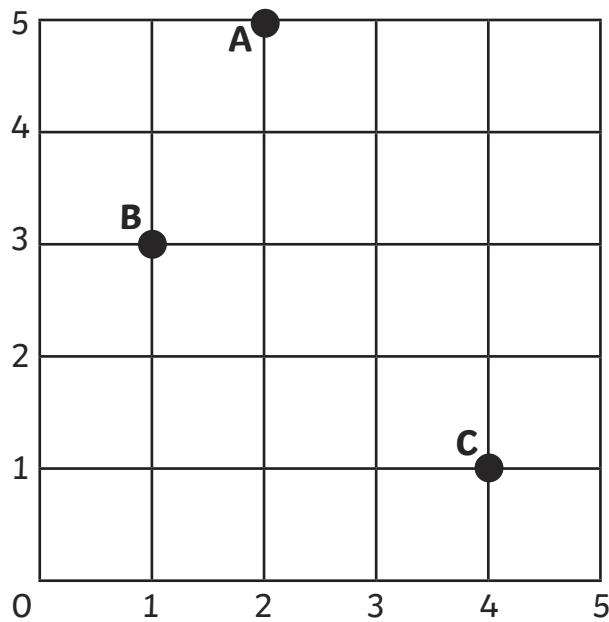


2. Reflect the shapes in the mirror line.



Position and Direction Answers

1. Write the coordinates for the points marked on the grid.



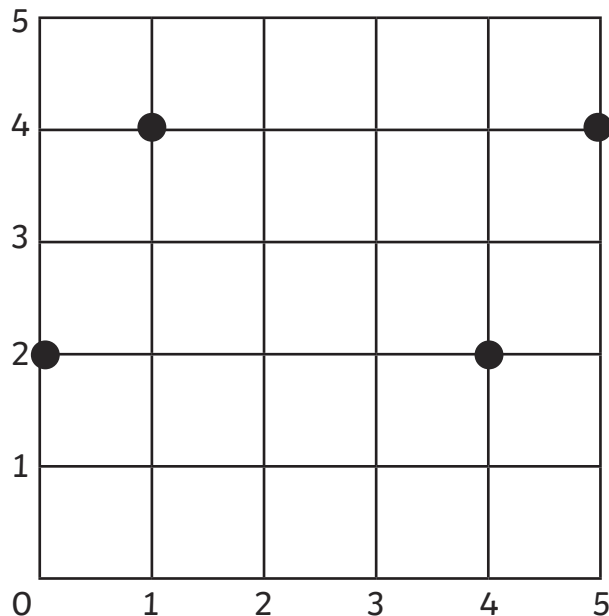
A (2,5)

B (1,3)

C (4,1)

2. Plot these coordinates on the grid. What shape is made?

Parallelogram



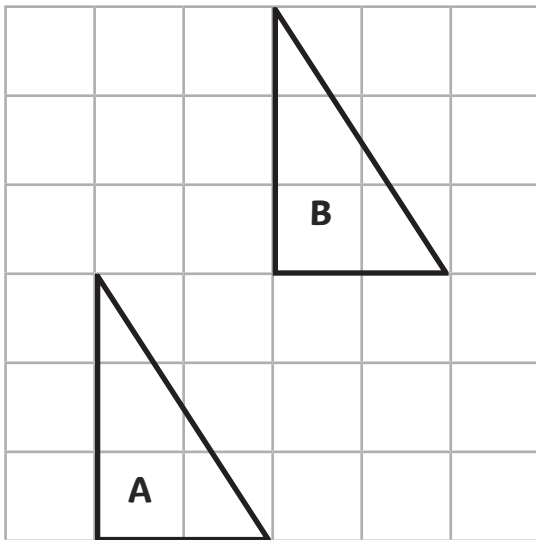
(0, 2)

(1, 4)

(4, 2)

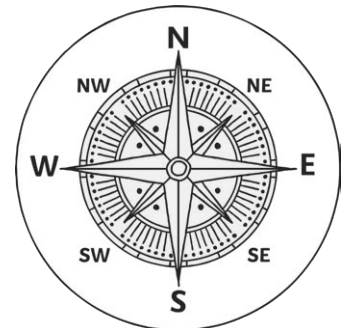
(5, 4)

3. Translate this triangle 2 squares to the right and 3 squares up. Label this new triangle B.



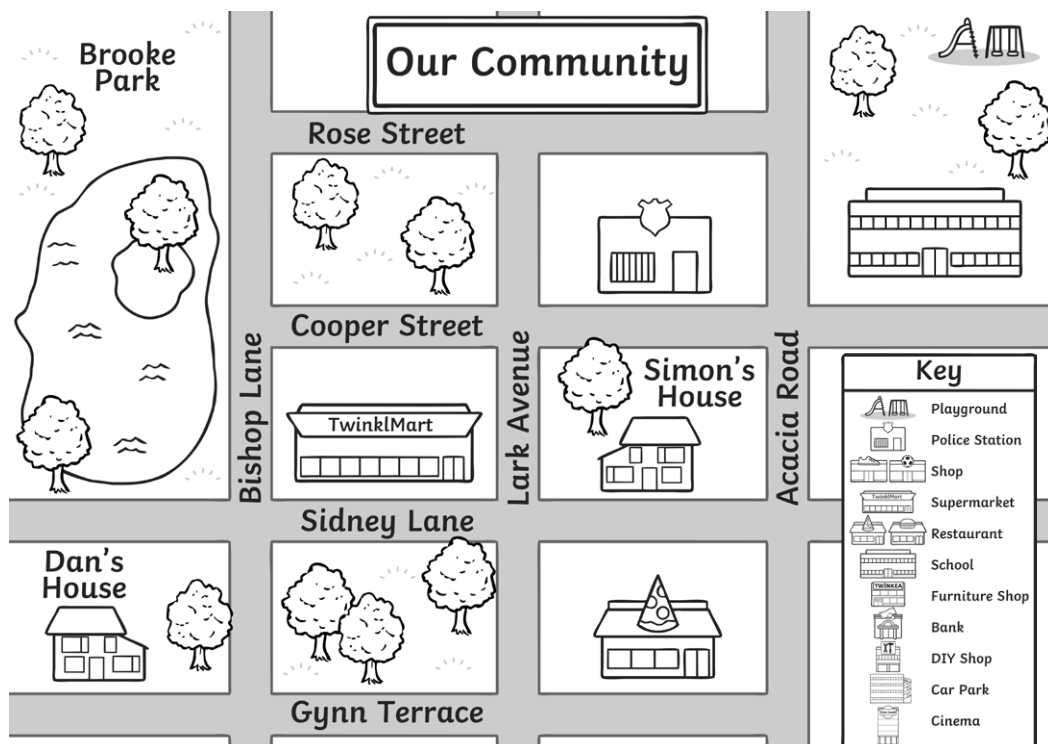
4. Amy is walking north east. She turns quarter of a turn anticlockwise. What direction is she walking now?

North West



5. Simon left his house and turned right. He made a right turn at the next junction and right at the junction after. Where is Simon?

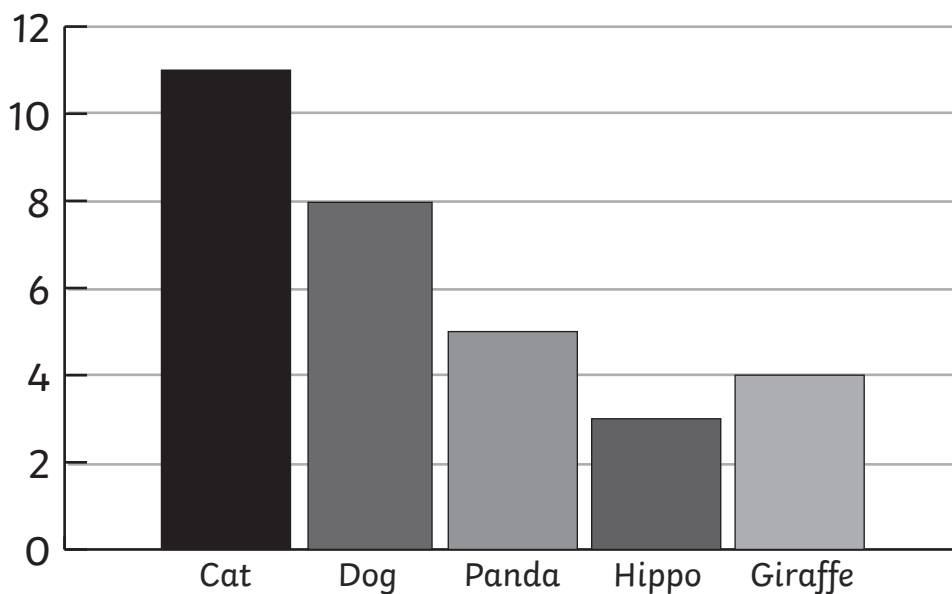
Police Station



Statistics Answers

1. A class were asked to choose their favourite animals. These were the results:

Animal	Tally
Cat	
Dog	
Panda	
Hippo	
Giraffe	



a) Use the information in the bar chart to complete the information in the table.

See completed table for answers.

b) Add the information for 'Dog' to the bar chart.

See completed bar chart.

c) Which was the most popular animal?

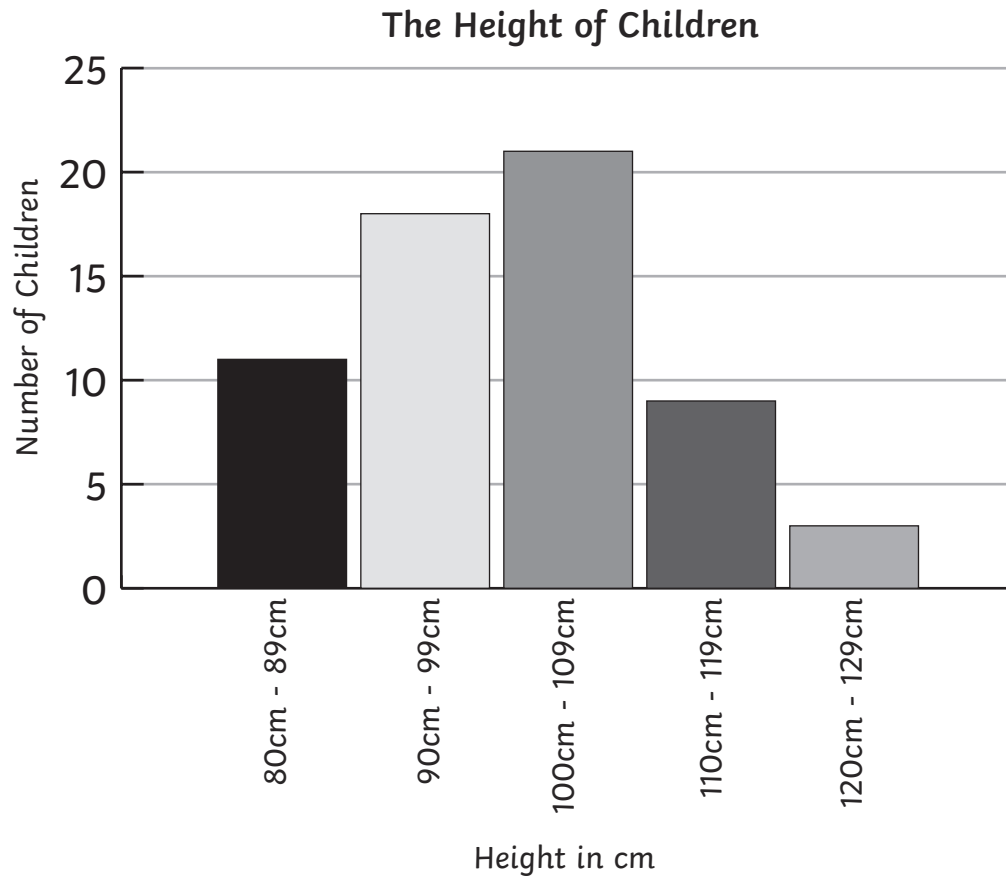
Cat

d) Which animal was half as popular as a dog?

Giraffe

e) How many children were asked in total?

2. A school measured the heights of all children. The results are shown in the graph below.



a) Which height was the least common in the school?

120cm – 129cm

b) How many children measured less than 1m?

29 children

c) 3 more children joined the school who measure between 110cm – 119cm. Add this information to the graph.

The 4th bar should now show 12.

d) After these children joined, how many children were measured in total?

65 children