Answer **all** questions in the spaces provided.

1 (a) Complete this shopping bill.

2.5 kg of potatoes at £ 1.14 per kg.	
8 lemons at 28 p each.	
Total	

(3 marks)

1 (b) How many books costing £ 3.75 each can be bought for £ 20?

.....

.....

Answer ..... *(2 marks)*

2 Complete the table of equivalent fractions, decimals and percentages.

Fraction	Decimal	Percentage %
$\frac{1}{4}$	0.25	25
$\frac{1}{5}$		20
$\frac{13}{100}$	0.13	
	0.05	

(3 marks)

8

Turn over ▶

3 (a) On one day the temperatures at 3 am in four cities are recorded.

City	Temperature (°C)
London	3
Oslo	–5
Rome	6
New York	–10

3 (a) (i) Which city has the highest temperature?

Answer ..... *(1 mark)*

3 (a) (ii) Which city has the lowest temperature?

Answer ..... *(1 mark)*

3 (b) The wind chill tells you how much colder you feel in a wind.

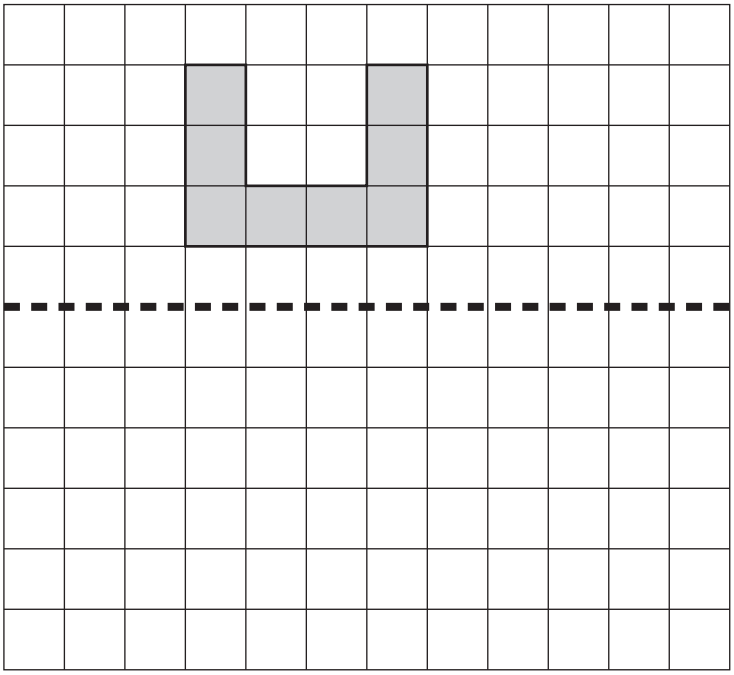
Temperature out of a wind + Wind chill = Temperature you feel in a wind

Complete the table.

Temperature out of a wind	Wind chill	Temperature you feel in a wind
5	–6	–1
–2	–7	
	–11	–10
–2		–12

(3 marks)

4 Draw the reflection of the shape in the mirror line.



(2 marks)

Turn over for the next question

7

5 The cost of hiring a boat is given by the formula

Cost of hire = Hourly cost × Number of hours

The hourly cost is £7.50

5 (a) Asif hires a boat for three hours.

What is the cost of hire?

.....

Answer £ ..... *(2 marks)*

5 (b) Sunni pays £37.50 for hiring the boat.

For how many hours does he hire the boat?

.....

Answer ..... hours *(2 marks)*

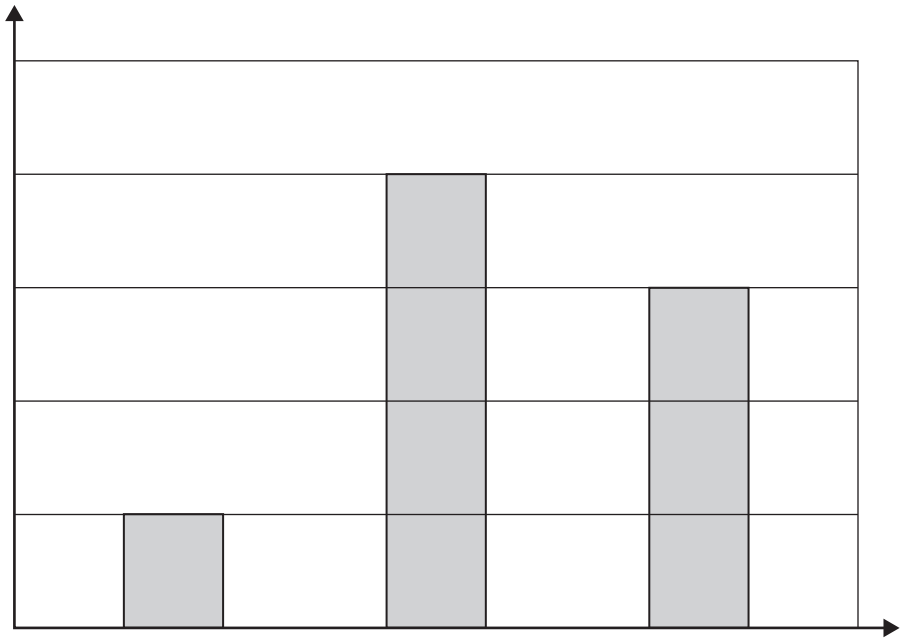
6 The table shows information about three items sold in a shop.

Item	Number sold
Calculator	20
Ruler	5
Pencil	15

The bar chart shows the same information.

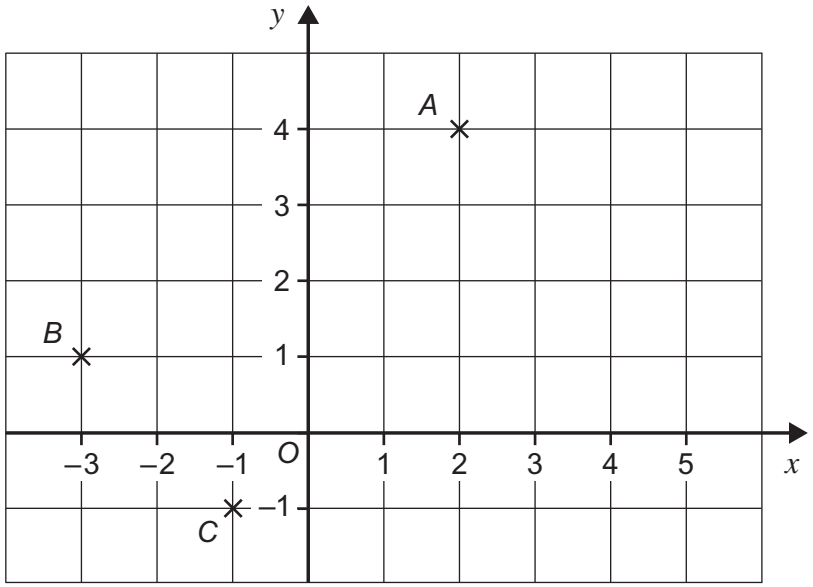
Complete a fully labelled bar chart, including a scale on the vertical axis.

(3 marks)



7

7



7 (a) Write down the coordinates of *A*, *B* and *C*.

Answer *A* (..... , ...)

B (..... , ...)

C (..... , ...)

(3 marks)

7 (b) Join the points *A, B, C* to form a triangle.

Write down the special name of this triangle.

Answer ..... *(1 mark)*

7 (c) Write down the coordinates of the midpoint of *BC*.

Answer (..... , ...)*(1 mark)*

8 (a) A sequence starts

49 46 43 40

8 (a) (i) Write down the next two terms.

Answer ..... and ..... *(2 marks)*

8 (a) (ii) What is the rule for continuing the sequence?

Answer ..... *(1 mark)*

8 (b) Another sequence starts

57 50 43 36

This sequence is continued.

What is the first negative number in this sequence?

.....

.....

Answer ..... *(1 mark)*

8 (c) The first sequence is also continued.
The two sequences have the number 43 in common.

What is the next number that the two sequences have in common?

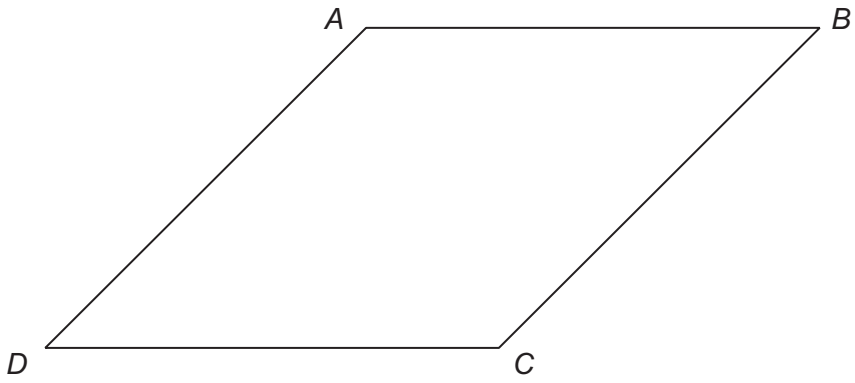
.....

.....

Answer ..... *(2 marks)*

11

9 The quadrilateral *ABCD* is drawn accurately.



9 (a) (i) Which of these is the special name for the quadrilateral *ABCD*?
Circle the correct answer.

Kite **Rhombus** **Trapezium**

(1 mark)

9 (a) (ii) Explain your choice.

.....

.....

(1 mark)

9 (b) Measure the length *AC*.
Give your answer in millimetres.

Answer ..... mm *(1 mark)*

9 (c) Another quadrilateral *EFGH* has all of its angles 90°.

Complete the statement.

The quadrilaterial *EFGH* must be a ..... or a .....

(1 mark)

10 (a) Which of the following would be the most appropriate height for an adult male?

180mm 180cm 180m 180km

Answer ..... *(1 mark)*

10 (b) The height of Nelson's column in Trafalgar Square, London, is 52 metres.

1 metre = 3.25 feet

Work out the height of Nelson's column in feet.

.....

Answer ..... feet *(2 marks)*

11 Calculate the mean of these eight numbers.

3 8 4 6 8 5 1 9

.....

.....

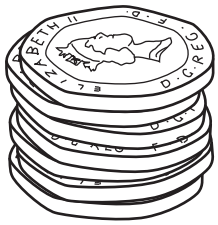
.....

.....

Answer ..... *(3 marks)*

10

12 Abigail has a pile of 20p coins and a pile of 50p coins.



20p coins

50p coins

She can use coins from the piles to make different totals.

12 (a) Complete the table.

.....

.....

.....

Number of 20p coins	Number of 50p coins	Total (£)
2	6	3.40
3		3.10
	9	5.90

(2 marks)

12 (b) Explain why Abigail **cannot** make a total of £6.50 using just 20p coins?

.....

.....

(1 mark)

12 (c) List the **four** ways Abigail can make a total of £3

Answer 1 .....

Answer 2 .....

Answer 3 .....

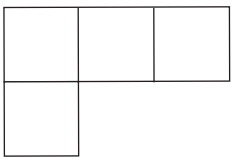
Answer 4 .....

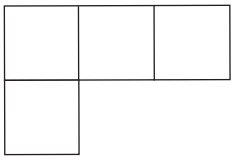
(2 marks)

13 This shape is made from squares.

One square is added to give the shape one line of symmetry.

Show **two** different ways that this can be done.





(2 marks)

7