6 Solve.

(a) $x + 7 = 11$

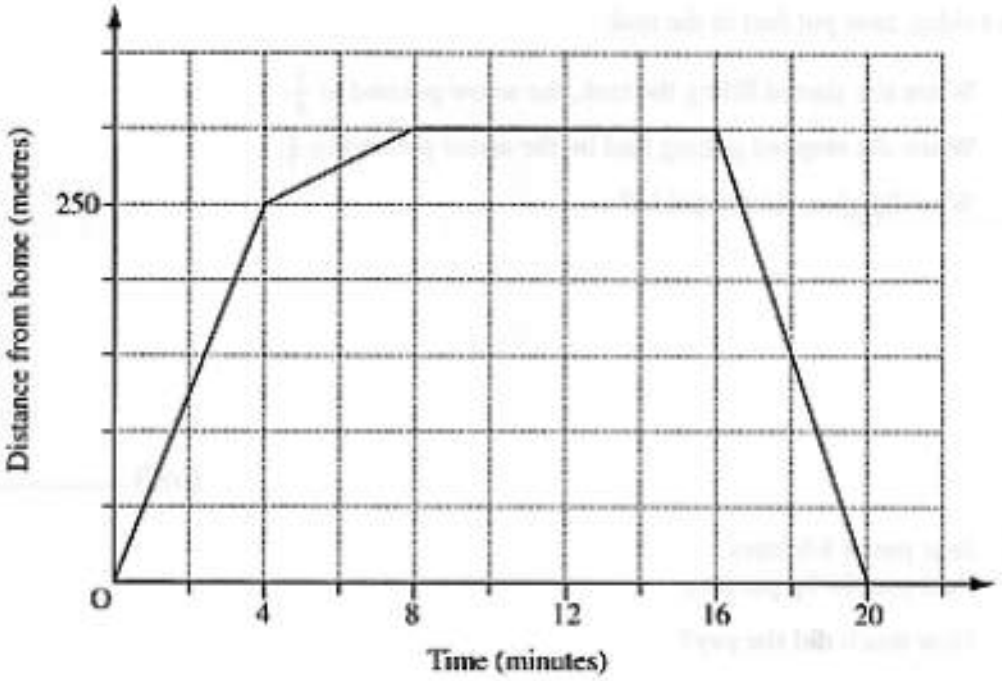
(a) .....[1]

(b) $5x = 15$

(b).....[1]

2

7 The graph shows Ahmed's journey.
He went to the post box then on to the minimarket.



(a) The post box is 250 m from Ahmed's home.

How long did it take Ahmed to walk to the post box?

(a) .....minutes [1]

(b) How far is the minimarket from Ahmed's home?

(b).....m [1]

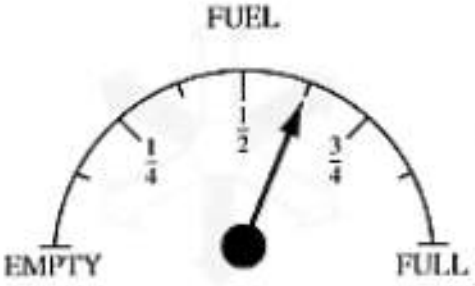
(c) The last section of the graph slopes down.

What does this show?

.....[1]

3

8 (a) This is what Jane's fuel gauge shows on Wednesday.



What fraction is the arrow pointing to?

(a) .....[1]

(b) On Friday, Jane put fuel in the tank.

(i) When she started filling the tank, the arrow pointed to $\frac{1}{8}$.
When she stopped putting fuel in, the arrow pointed to $\frac{1}{2}$.
What fraction did she put in?

(b)(i) .....[2]

(ii) Jane put in 9·6 litres.
Fuel cost 84·9p per litre.
How much did she pay?

(ii) £ .....[3]

(c) Pete wrote down how many litres of fuel he put in his car on his last 10 visits to the service station. Here are his results.

20·3	30·2	26·1	14·5	35·6
27·4	16·2	38·4	26·9	18·4

(i) Find the mean.

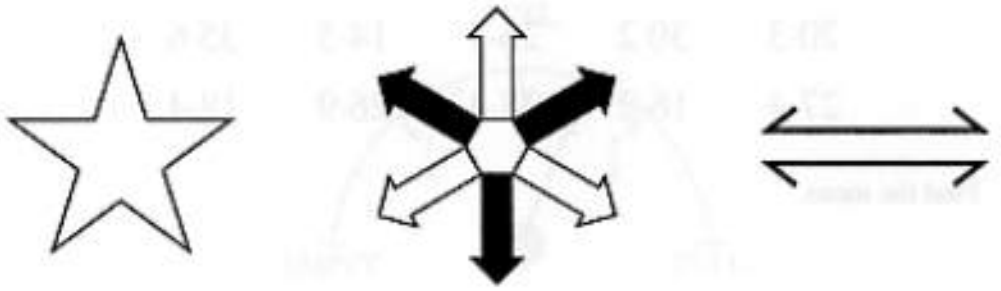
(c)(i) .....litres [3]

(ii) Find the range.

(ii) .....litres [2]

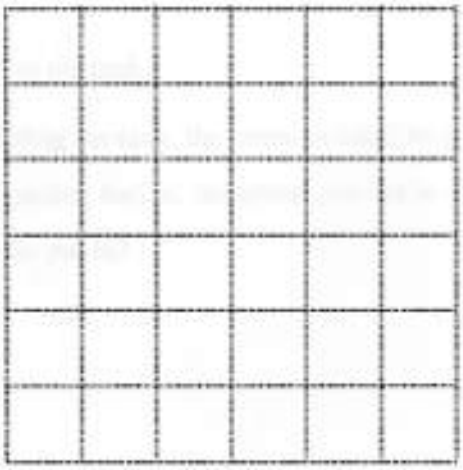
[1]

9 (a) Write the order of rotational symmetry for each shape.



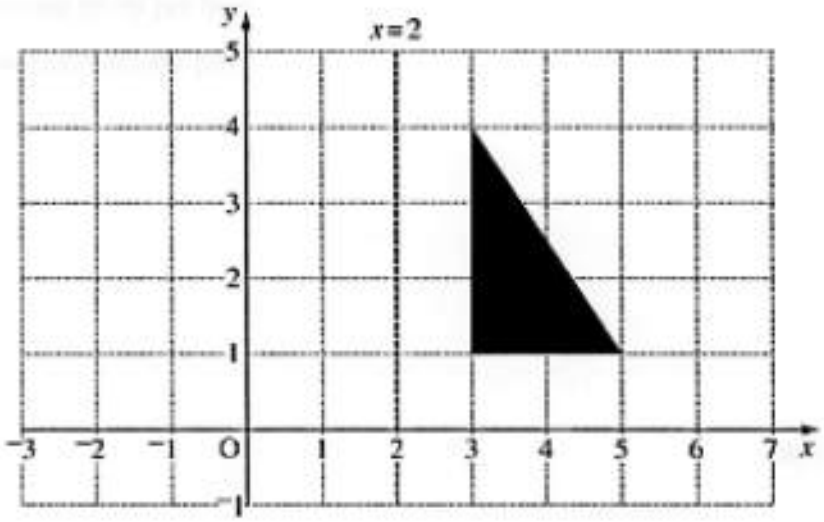
.... [2]

(b) Draw a simple shape which has rotational symmetry of order 2 but has no lines of symmetry.



[2]

(c) Reflect this triangle in the line $x = 2$.

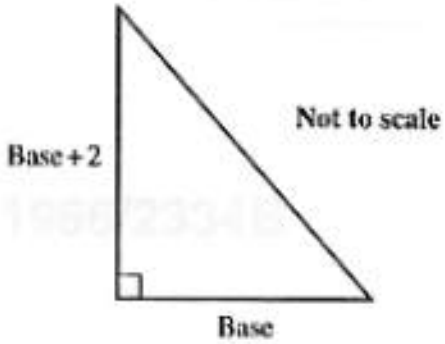


[2]

6

10 The area of this triangle is 8·32 cm^2.
The height is 2 cm more than the base.

Use trial and improvement to find the length of the base.
Show your trials clearly.
One has been done for you.



Base (cm)	Height (cm) = Base + 2	Area (cm^2) = Base × Height ÷ 2	Too large	Too small
4	6	$4 \times 6 \div 2 = 12$	✓	

Base = ...cm [3]

[3]