ELECTRONIC CALCULATORS MUST NOT BE USED IN THIS PAPER

1 **(a)** Write down the value of the 5 in the number 253 624.
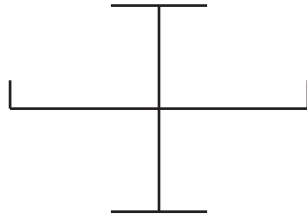
.... [1]

(b) The crowd at a sports event is exactly 35 687.

Write this number correct to the nearest ten.

.... [1]

2 **(a)**

Write down the number of lines of symmetry of this diagram.

.... [1]

(b)
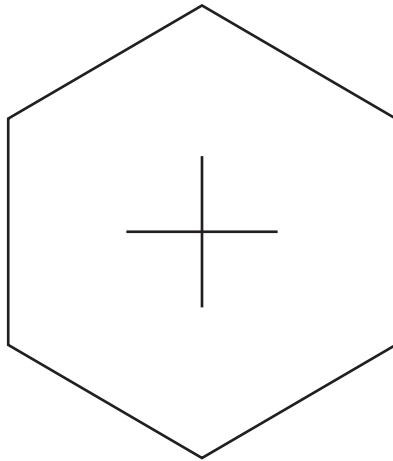
Write down the order of rotational symmetry of this diagram.

.... [1]

5 The diagram shows the net of a solid drawn on a 1 cm grid.
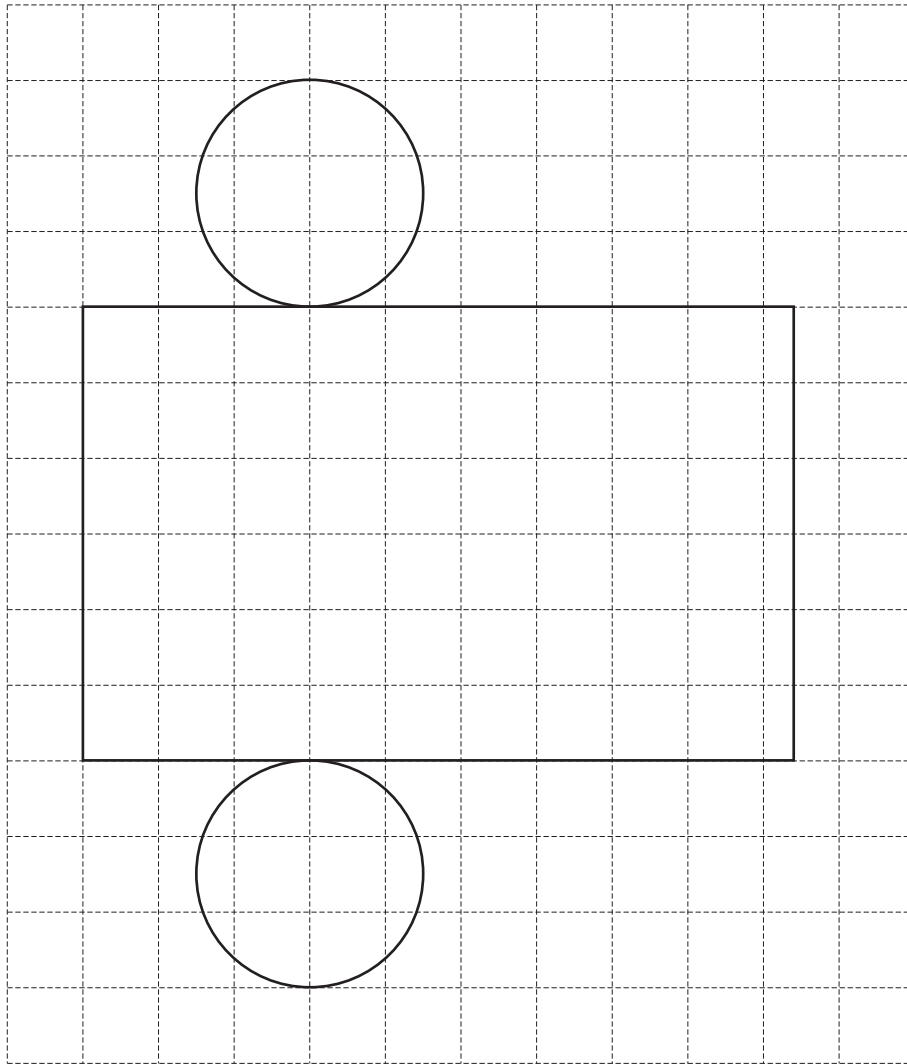
Name the solid formed by this net and describe fully the dimensions of this solid.

Name of solid ....

Dimensions .... [3]

10 The table below shows the monthly rent for nine apartments and the distance of these apartments from the city centre.

Distance from the city centre (km)	0.8	1.5	2.7	3.6	2.0	4.3	2.3	3.0	1.0
Monthly rent ($)	570	470	420	300	480	270	390	360	530

Distance from the city centre (km)
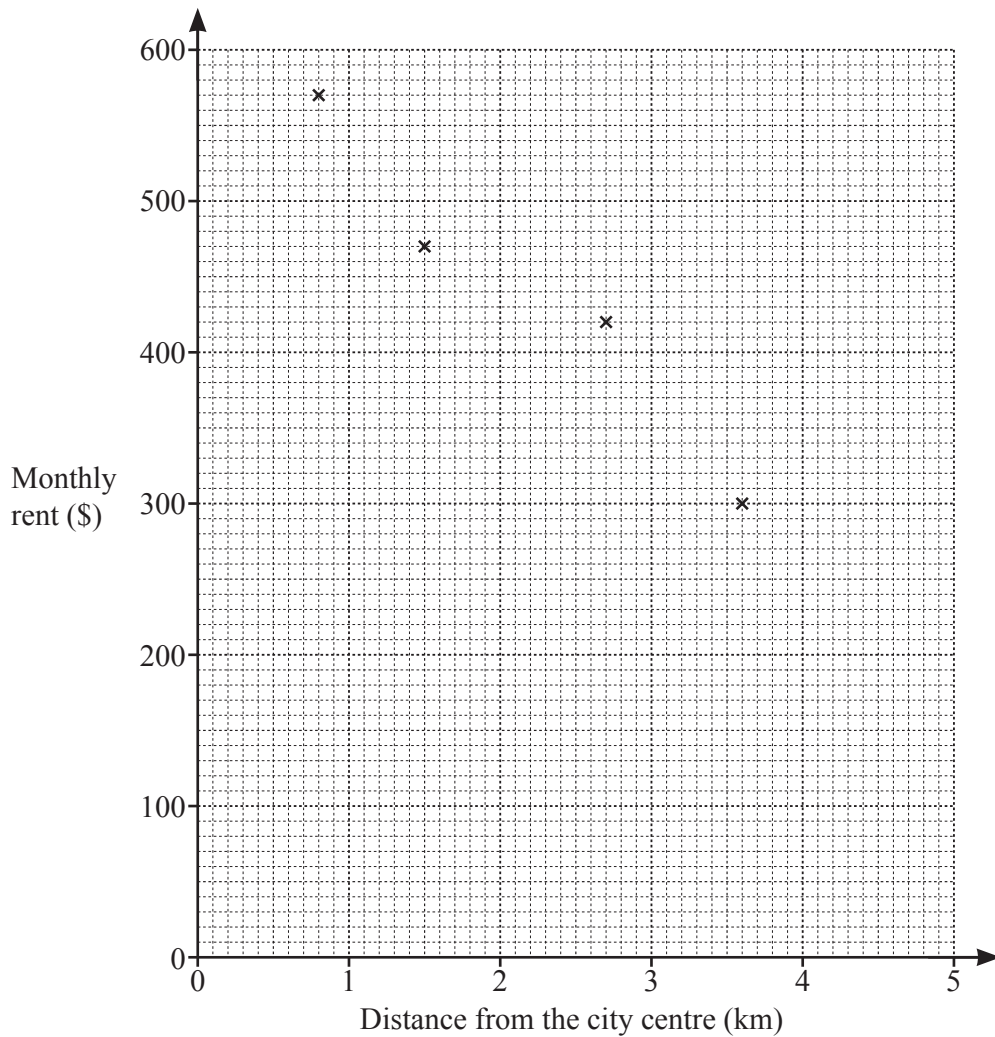
(a) Complete the scatter diagram.
The first four points have been plotted for you. [2]

(b) What type of correlation is shown on the scatter diagram?

.... [1]

(c) On the scatter diagram, draw a line of best fit. [1]

(d) Use your line of best fit to estimate the monthly rent for an apartment which is 4 km from the city centre.
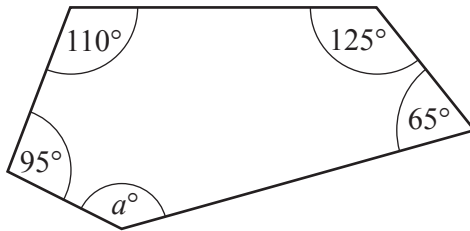
$.. [1]

 [Turn over

7

NOT TO
SCALE

The area of the rectangle is $9\,\text{cm}^2$.
The area of the triangle is $85\,\text{mm}^2$.

Calculate the shaded area.
Give your answer in cm^2.

.... cm^2 [2]

8

NOT TO
SCALE

The diagram shows a pentagon.

Find the value of a.

$a =$ .... [3]

14
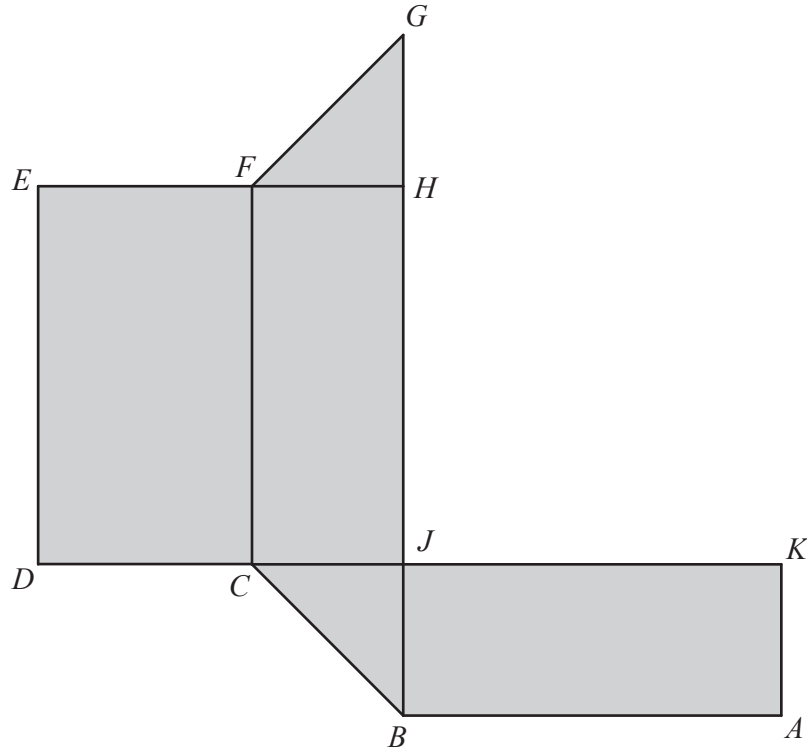
This net is folded to make a triangular prism.

(a) Which vertices join with *A*?

.... [1]

(b) Which edge joins with *DE*?

.... [1]

(c) *FH* = 2 cm, *GH* = 2 cm and *JH* = 5 cm.

Find the volume of the triangular prism.

.... cm³ [2]