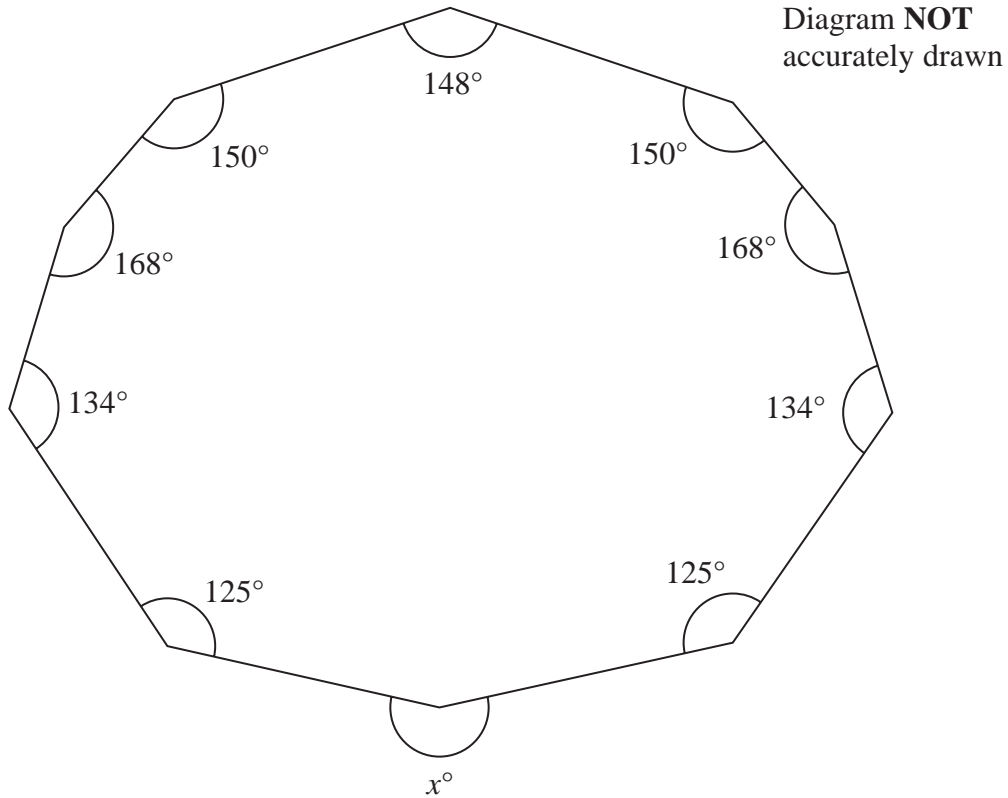


- 1 Here is a 10-sided polygon.



Work out the value of x .

$x =$

(Total for Question 1 is 4 marks)

2 The diagram shows cuboid $ABCDEFGH$.

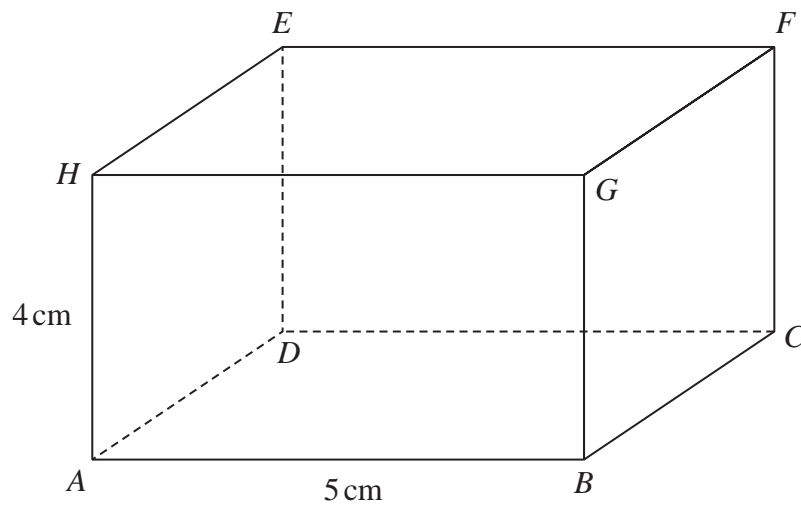


Diagram **NOT**
accurately drawn

$$AB = 5 \text{ cm}$$

$$AH = 4 \text{ cm}$$

The size of the angle between CH and the plane $ABCD$ is 35°

Calculate the volume of the cuboid.

Give your answer correct to 3 significant figures.

..... cm^3

(Total for Question 2 is 5 marks)

- 3 The diagram shows a rectangle and a diagonal of the rectangle.

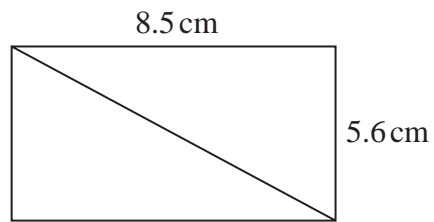


Diagram **NOT**
accurately drawn

Work out the length of the diagonal of the rectangle.
Give your answer correct to 1 decimal place.

..... cm

(Total for Question 3 is 3 marks)

- 4 The diagram shows parts of three regular polygons, **A**, **B** and **C**, meeting at a point.

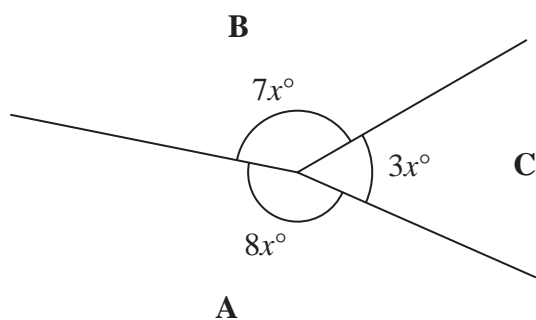


Diagram **NOT**
accurately drawn

Polygon **B** has n sides.

Work out the value of n .

$$n = \dots\dots\dots$$

(Total for Question 4 is 4 marks)

- 5 The diagram shows a regular octagon $ABCDEFGH$ and a regular pentagon $ABIJK$

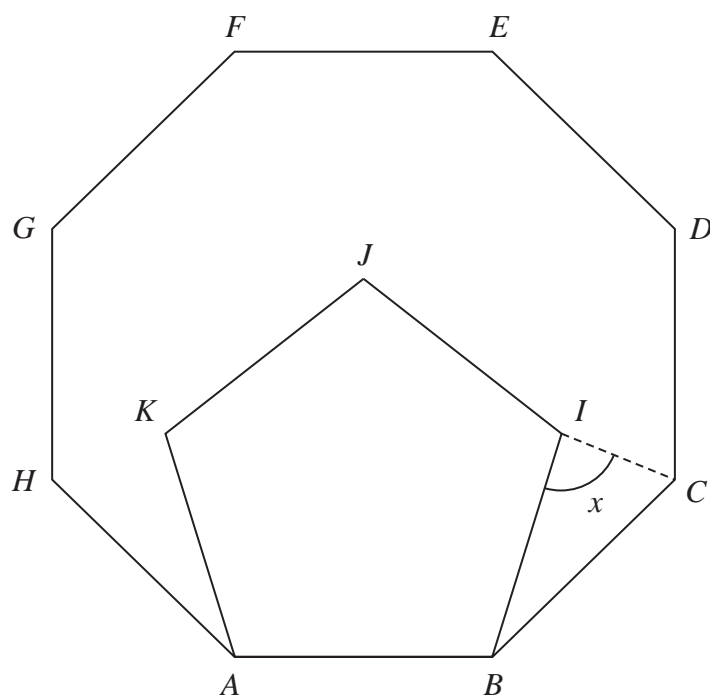


Diagram **NOT**
accurately drawn

Work out the size of the angle x

(Total for Question 5 is 4 marks)

6 The diagram shows a regular 10-sided polygon, $ABCDEFGHIJ$

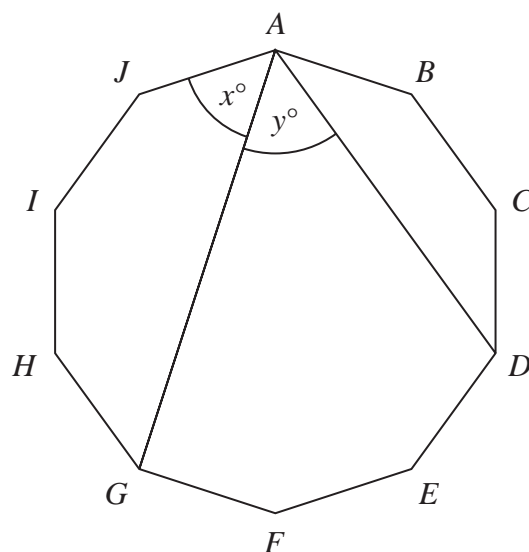


Diagram **NOT**
accurately drawn

Show that $x = y$

(Total for Question 6 is 4 marks)