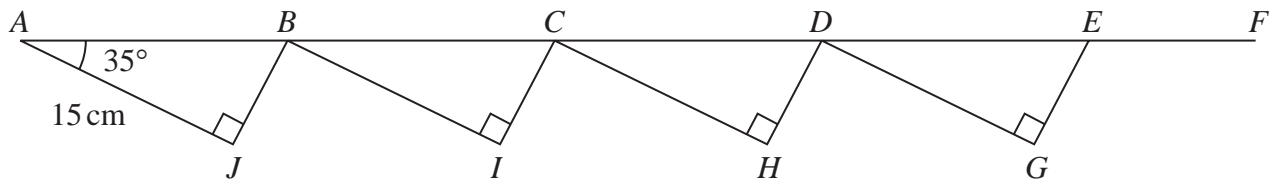


- 1 The diagram shows four congruent right-angled triangles  $ABJ$ ,  $BCI$ ,  $CDH$  and  $DEG$ .  
The diagram also shows the straight line  $ABCDEF$ .

Diagram **NOT**  
accurately drawn



$AJ = 15\text{ cm}$   
Angle  $BAJ = 35^\circ$   
 $AF = 80\text{ cm}$

Work out the length of  $EF$ .  
Give your answer correct to 3 significant figures.

..... cm

(Total for Question 1 is 5 marks)

- 2 The diagram shows two congruent isosceles triangles and parts of two congruent regular polygons, **X** and **Y**.

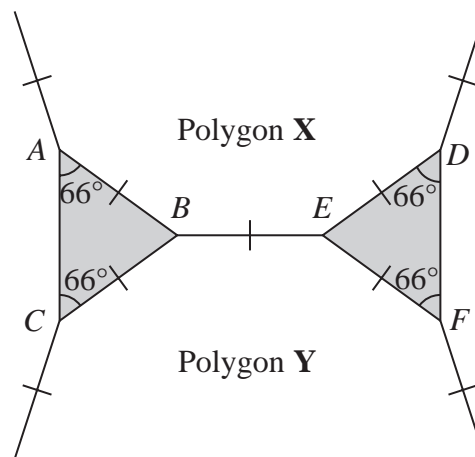


Diagram **NOT**  
accurately drawn

The two regular polygons each have  $n$  sides.

Work out the value of  $n$ .

$n = \dots\dots\dots$

(Total for Question 2 is 3 marks)