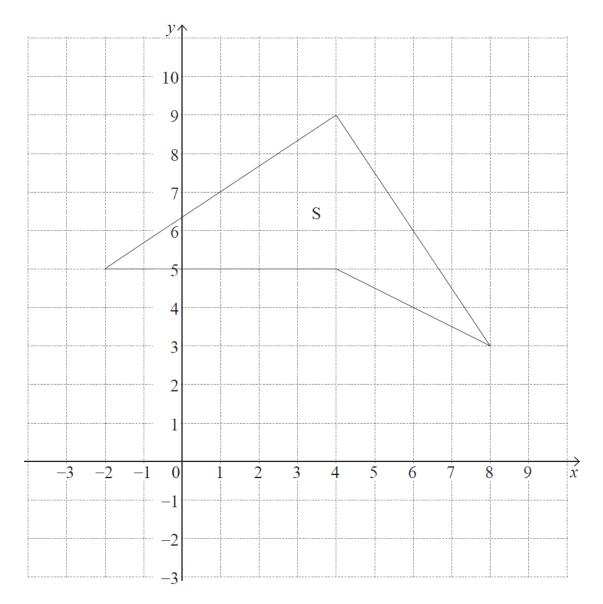
## m7 =32 days to go!

The diagram shows a regular nonagon ABCDEFGHI with an isosceles triangle DCJ attached.

The angle DJC =  $30^{\circ}$ 

Calculate the size of the angle EDJ.

Show your working clearly.



- (a) On the grid above, draw an enlargement of the shape S, using a scale factor of  $\frac{1}{2}$  and centre (0, -1).
- (b) If the shape S has an area of 20 cm<sup>2</sup>, what is the area of the enlarged shape?

Answer \_\_\_\_\_ cm<sup>2</sup> [1]