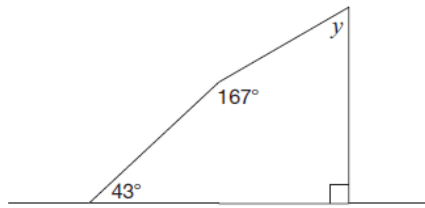


Angle Review

Consider the diagram below.



What is the value of y ?

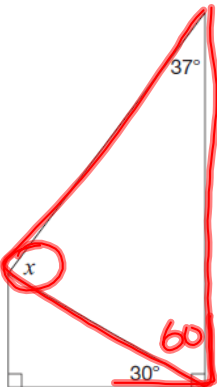
- a 43°
- b 60°
- c 137°
- d 150°

$$(n-2) \times 180$$

$$y = 360 - 90 - 43 - 167$$

$$= 60$$

Consider the diagram below.

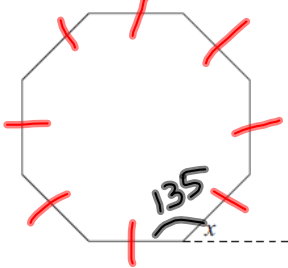


What is the value of x in the diagram?

- a 30°
- b 53°
- c 60°
- d 83° ✓

$$180 - 60 - 37 = 83$$

Consider the regular octagon below.



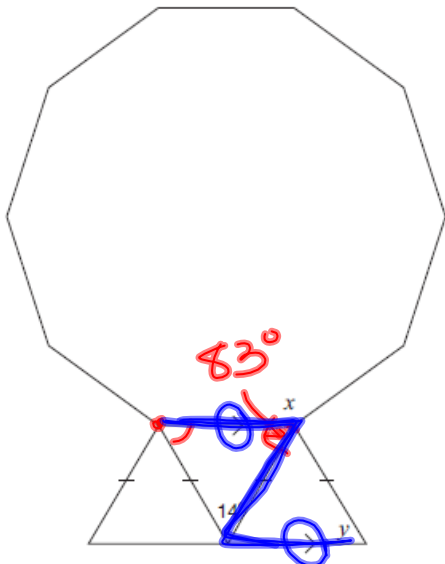
What is the value of x ?

- a 15°
- b 30°
- c 45°
- d 60°

$$\begin{aligned} &(n-2) \times 180 \\ &= 6 \times 180 \\ &= 1080 \div 8 \\ &= 135 \end{aligned}$$

Diamond Cut

The diagram below shows a regular decagon and three isosceles triangles.



$$\begin{aligned} &(n-2) \times 180 \\ &8 \times 180^\circ = 1440 \div 10 \\ &= \frac{1440}{10} \\ &= 144^\circ \end{aligned}$$

$$y = 83$$

The sum of the interior angles of a polygon is 2700° .

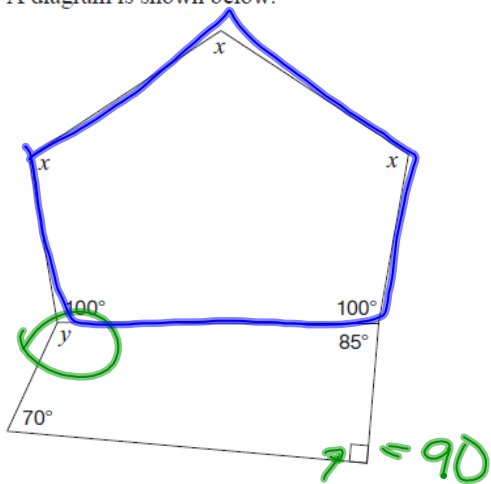
How many sides does the polygon have?

- a 19
- b 17
- c 15
- d 13

$$\begin{aligned}
 2700 &= (n-2) \times 180 \\
 \frac{2700}{180} &= \frac{(n-2) \times 180}{180} \\
 15 &= n-2 \\
 17 &= n
 \end{aligned}$$

Daring Diagram

A diagram is shown below.



$$\begin{aligned}
 y &= 360 - 90 - 70 - 85 \\
 &= 115^\circ
 \end{aligned}$$

$$\begin{aligned}
 (n-2) \times 180 \\
 (5-2) * 180 &= 540
 \end{aligned}$$

$$\begin{aligned}
 540 - 100 - 100 \\
 \frac{3x}{3} &= \frac{340}{3} \quad x = 113.\overline{3}^\circ
 \end{aligned}$$

