

Proof  $YA = YX$   $\left[ \begin{array}{l} \text{every point on per.} \\ \text{bis. of a line segment} \\ \text{is equidistant from} \\ \text{its end points} \end{array} \right]$   
 $ZB = XZ$

$$AB = 11 \text{ cm}$$

$$AY + YZ + ZB = 11 \text{ cm}$$

$$XY + YZ + ZX = 11 \text{ cm}$$

In  $\triangle YAX$

$$YA = YX$$

$$\angle 2 = \angle 1 = 15^\circ \text{ (isosceles } \triangle \text{ property)}$$

$$\angle 3 = \angle 1 + \angle 2 = 15 + 15 = 30^\circ \text{ (exterior angle property of } \triangle \text{)}$$

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