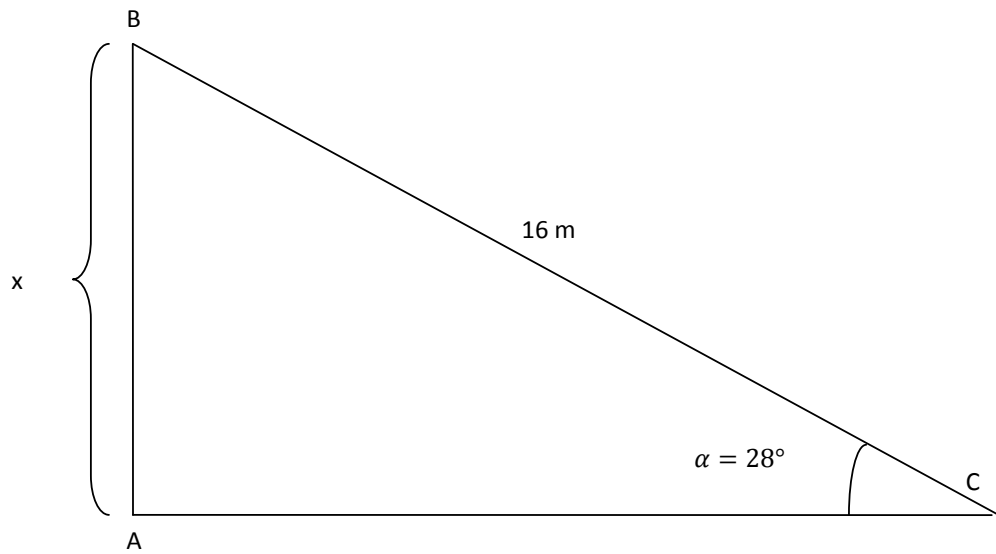


One acute angle of a right triangle measures 28 degrees. To the nearest tenth what is the length of the side opposite that angle if the hypotenuse measures 16 meters

Solution:



By the definition:

$$\frac{AB}{BC} = \frac{x}{16} = \sin \alpha.$$

So we have

$$x = BC \cdot \sin \alpha = 16 \cdot \sin 28^\circ \approx 7,5 \text{ (m)}.$$

Answer:

7,5 m.