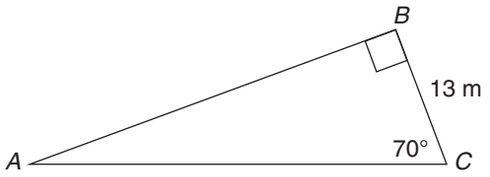
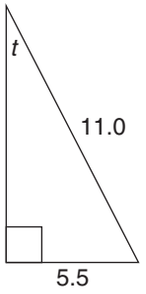
Check Up

1. Determine the length of AC, to the nearest tenth.

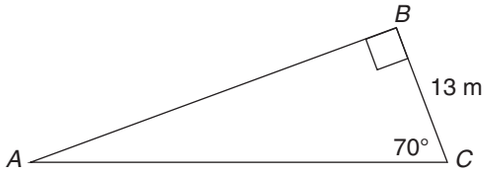


2. Determine the measure of angle t, to the nearest degree.



Check your answers.

1. Determine the length of AC, to the nearest tenth.



$$\cos 70° = \frac{\text{length adjacent to } 70°}{\text{hypotenuse}}$$

$$\cos 70° = \frac{13 \text{ m}}{AC}$$

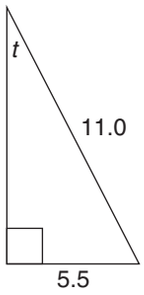
$$AC \cdot \cos 70° = \frac{13 \text{ m}}{AC} \cdot AC$$

$$\frac{AC \cdot \cos 70°}{\cos 70°} = \frac{13 \text{ m}}{\cos 70°}$$

$$AC = 38.009\ldots \text{m}$$

$$AC \doteq 38.0 \text{ m}$$

2. Determine the measure of angle t, to the nearest degree.



$$\sin t = \frac{\text{length opposite } t}{\text{hypotenuse}}$$

$$\sin t = \frac{5.5}{11}$$

$$t = \sin^{-1}\left(\frac{5.5}{11}\right)$$

$$t = 30°$$