6.4 Do Now Quiz: Right triangle trigonometry

Do Now (PreQuiz)

- 1. Calculate each value. Round to the nearest thousandth.
 - (a) $\sin 11^{\circ}$

(c) $\tan 23^{\circ}$

(b) $\cos 62^{\circ}$

- (d) $\sin 81^{\circ}$
- 2. Find θ . Round to the nearest whole degree.

(a)
$$\theta = \sin^{-1}(\frac{3}{5})$$

(c)
$$\theta = \cos^{-1}(0.500)$$

(b)
$$\theta = \tan^{-1}(0.88)$$

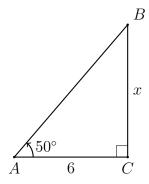
(d)
$$\tan \theta = \frac{11.3}{6.9}$$

3. Solve each equation for x, rounding to the nearest tenth.

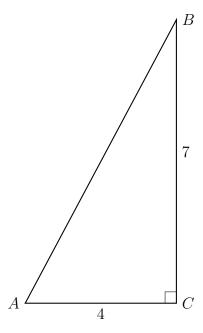
(a)
$$\cos 71^\circ = \frac{x}{15}$$

(b)
$$\tan 49^{\circ} = \frac{12.7}{x}$$

4. Given right $\triangle ABC$ with AC = 6, $m \angle A = 50^{\circ}$. Find the value of BC = x.



- 5. $\triangle ABC$ is shown with $m \angle C = 90^{\circ}$ and the lengths of the triangle's sides are AC = 4, BC = 7. (not drawn to scale)
 - (a) Write down the value of $\tan A$.
 - (b) Find the measure of $\angle A$.
 - (c) Write down the value of $\tan B$.
 - (d) Find the measure of $\angle B$.



- 6. Given $\triangle ABC$ with AC=9 centimeters, altitude h=7 cm, and the base $\hat{B}=40^{\circ}$. (diagram not to scale)
 - (a) Find \hat{A} using $\hat{A} = \sin^{-1} \frac{7}{9}$.
 - (b) Find BC by solving the Law of Sines

$$\frac{BC}{\sin A} = \frac{9}{\sin B}$$

