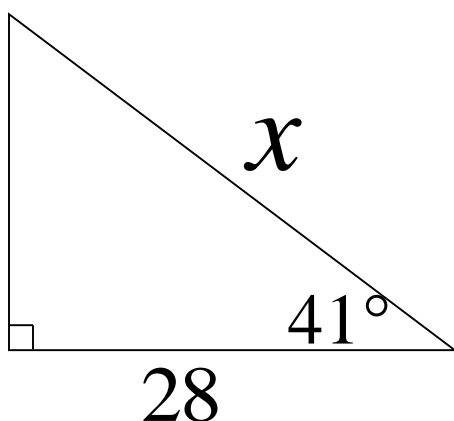


1. What is the value of x ?



2. Find a positive and negative angle coterminal to:

$$\frac{\pi}{6}$$

3. Find the value of all six trig functions if the terminal side of an angle contains the point: $(6, 2)$.
4. Find the value of all six trig functions given $\tan \theta = \frac{-12}{5}$ and the angle is in Quadrant IV.
5. What is the reference angle for: 236°

6. Convert 18° to radians

7. What is the exact value of: $\cos \frac{5\pi}{3}$

8. What is the exact value of: $\tan 135^\circ$

9. What is the period, amplitude, and phase shift of the sinusoidal function?

$$y = 3 \sin(2x - 3\pi) + 1$$

10. What is the period, amplitude, and phase shift of the sinusoidal function?

$$y = \frac{1}{2} \cos(3x - 4) + 1$$

ANSWERS

1. $x = 37.1$

2. $\frac{13\pi}{6}, -\frac{11\pi}{6}$

$$\sin \theta = \frac{\sqrt{10}}{10} \quad \csc \theta = \sqrt{10}$$

$$\cos \theta = \frac{3\sqrt{10}}{10} \quad \sec \theta = \frac{\sqrt{10}}{3}$$

3. $\tan \theta = \frac{1}{3} \quad \cot \theta = 3$

$$\sin \theta = \frac{-12}{13} \quad \csc \theta = \frac{13}{-12}$$

$$\cos \theta = \frac{5}{13} \quad \sec \theta = \frac{13}{5}$$

4. $\tan \theta = \frac{-12}{5} \quad \cot \theta = \frac{5}{-12}$

5. 56°

6. $\frac{\pi}{10}$

7. $\frac{1}{2}$

8. -1

9. Period: π

Amplitude: 3

Phase Shift: $\frac{3\pi}{2}$

10. Period: $\frac{2\pi}{3}$

Amplitude: $\frac{1}{2}$

Phase Shift: $\frac{4}{3}$