

Chapter 2 Review

Determine the coterminal angle, find the reference angle, and draw and mark the two angles on a graph.

- 1) 483° 2) 235° 3) -106° 4) $\frac{11\pi}{3}$

Find the six trigonometric functions (exact values) of the given angle.

- 5) 210° 6) 315° 7) 180°

Find the exact value.

- 8) $8\sin 150^\circ - \cos^2 300^\circ$ 9) $\tan 240^\circ \sin 30^\circ + \frac{\cos 135^\circ}{\csc 330^\circ}$

Use your calculator to find each value.

- 10) $\sin 43^\circ$ 11) $\cos 7$ 12) $\sec 3.6$ 13) $\cot 12^\circ$

Use your calculator to determine the value correct to two decimal places.

- 14) $x = \cos^{-1}(0.3871)$ 15) $\theta = \sin^{-1}(0.8765)$ 16) $\theta = \cot^{-1}(0.4507)$

- 17) A flagpole casts a shadow 10.4 meters long on the ground. The angle of elevation of the sun is $33^\circ 20'$. How tall is the flagpole?

Convert to degrees.

- 18) $\frac{10\pi}{3}$ 19) $\frac{-\pi}{2}$ 20) $\frac{3\pi}{5}$

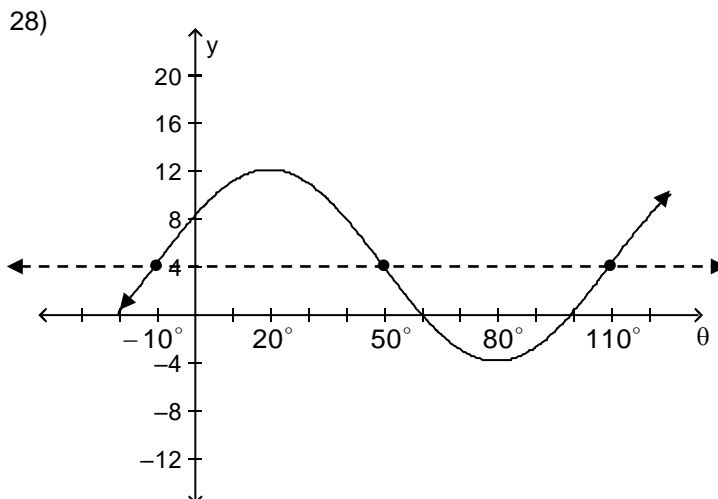
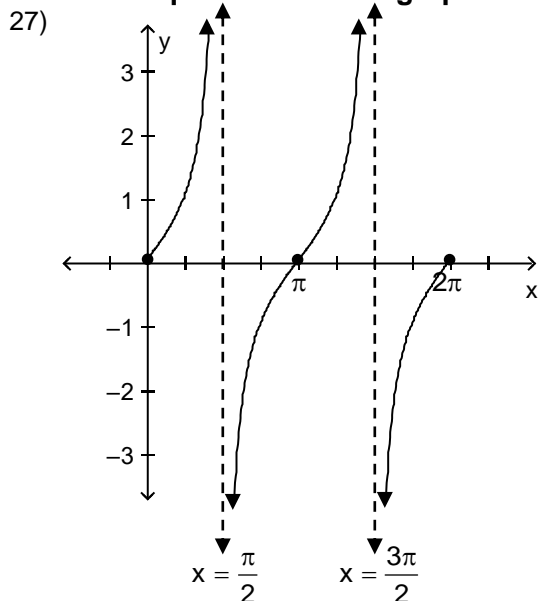
Convert to radians.

- 21) -308° 22) 145° 23) 850°

Graph at least one complete cycle of the given function's graph.

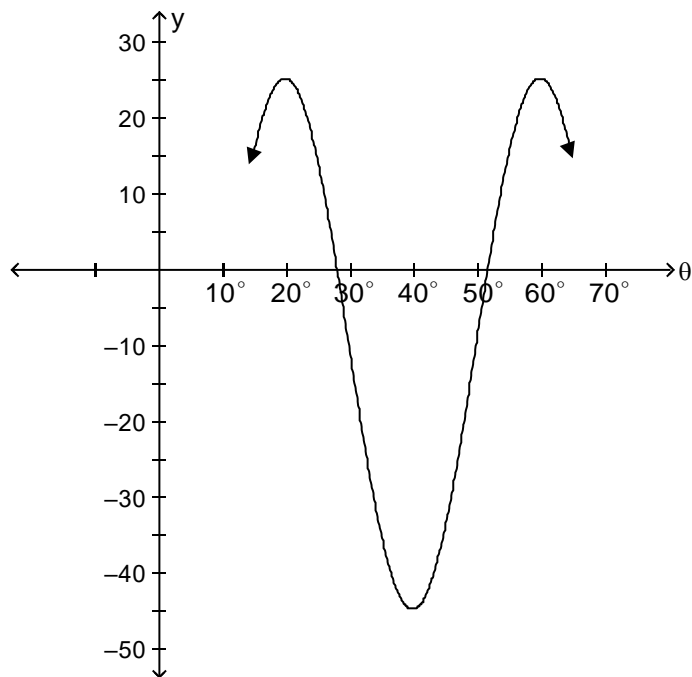
- 24) $y = \cot(2x)$ 25) $y = 2 + 4\cos\left[\frac{\pi}{2}(x - 5)\right]$ 26) $y = -3 + \sin\left[\frac{\pi}{3}(x - 2)\right]$

Write the equation for each graph.



Chapter 2 Review (continued)**Write the equation for the graph.**

29)

**Find the indicated principal value to 2 decimal places for θ or 4 decimal places for x .**

30) $\theta = \sin^{-1}(0.3561)$ 31) $\theta = \cos^{-1}(0.8463)$ 32) $x = \sin^{-1}(0.973)$ 33) $x = \cos^{-1}(0.5097)$

Find θ to 2 decimal places or x to 4 decimal places, getting:**a) the general solution,****b) the first three positive values of θ or x .**

34) $x = \sin^{-1}(0.98)$ 35) $\theta = \cos^{-1}(-0.15)$ 36) $\theta = \cos^{-1}\left(\frac{\sqrt{2}}{2}\right)$