

Practice for Q3OBQ4 and Quiz 4.

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Find a coterminal angle between 0° and 360° .

1) -150°

2) 675°

Find a coterminal angle between 0 and 2π for each given angle.

3) $\frac{5\pi}{2}$

4) $\frac{11\pi}{3}$

Find the reference angle.

5) 560°

6) -220°

7) $-\frac{49\pi}{18}$

8) $\frac{10\pi}{9}$

Convert each degree measure into radians.

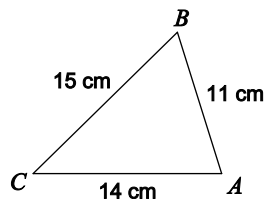
9) 150°

10) 120°

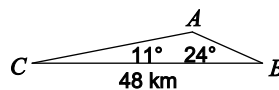
Convert each radian measure into degrees.

11) $-\frac{7\pi}{2}$

12) $-\frac{10\pi}{3}$

Find each measurement indicated. Round your answers to the nearest tenth.13) Find $m\angle C$ 

14) Find AB

**Find the exact value of each trigonometric function.**

15) $\cot 480^\circ$

16) $\tan -315^\circ$

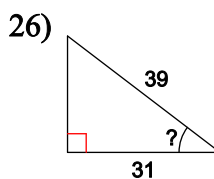
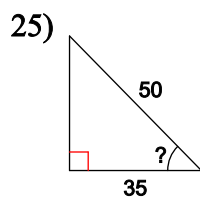
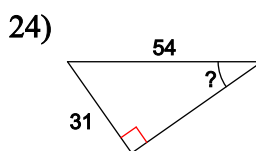
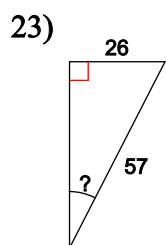
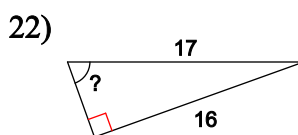
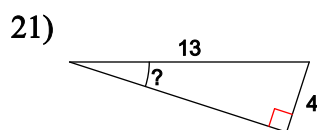
17) $\csc -270^\circ$

18) $\sin 420^\circ$

19) $\csc 210^\circ$

20) $\sin -360^\circ$

Find the measure of the indicated angle to the nearest degree. Tip: find ANGLE means use the inverse trig. functions.



Using degrees, find the amplitude, period, phase shift, and vertical shift of each function.

27) $y = 7\sin(3\theta - 30) + 4$

28) $y = -1 + 5\sin(6\theta + 150)$

29) $y = \frac{1}{3}\cos(4\theta + 135) + 3$

30) $y = 7\cos\left(\frac{\theta}{3} + 60\right) - 5$

31) $y = -1 + 4\sin(4\theta + 315)$

32) $y = \frac{1}{3}\sin(7\theta + 120) - 1$

33) $y = 9\sin(3\theta + 240) + 4$

34) $y = -5 + 4\cos\left(\frac{\theta}{3} + 60\right)$

Using radians, find the amplitude, period, phase shift, and vertical shift of each function.

35) $y = 2\cos\left(8\theta - \frac{2\pi}{3}\right) - 5$

36) $y = \frac{1}{3}\sin\left(5\theta - \frac{5\pi}{6}\right) + 2$

37) $y = -4 + \frac{1}{4}\sin\left(8\theta + \frac{5\pi}{6}\right)$

38) $y = -1 + 7\sin\left(6\theta + \frac{3\pi}{2}\right)$

39) $y = \cos\left(4\theta - \frac{\pi}{4}\right) - 2$

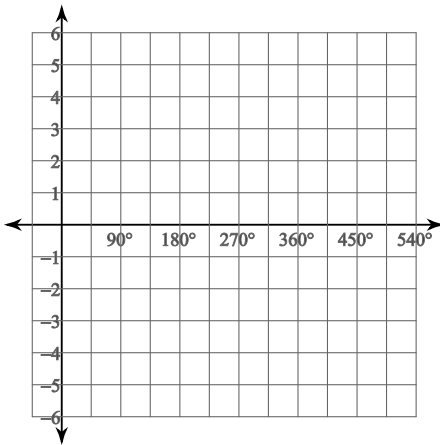
40) $y = \frac{1}{3}\sin\left(7\theta + \frac{2\pi}{3}\right) - 4$

$$41) y = \frac{1}{6} \sin \left(\frac{\theta}{6} + \frac{5\pi}{6} \right) + 2$$

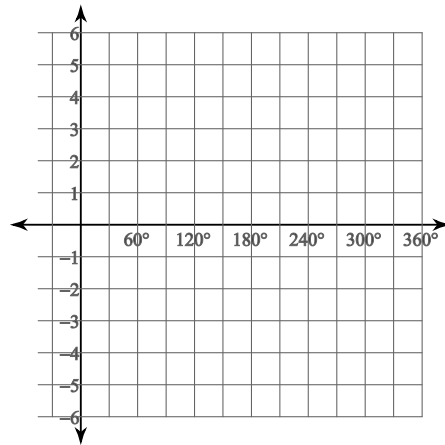
$$42) y = 6 \cos \left(2\theta + \frac{3\pi}{4} \right) + 5$$

Graph each function using degrees.

$$43) y = \sin \theta$$

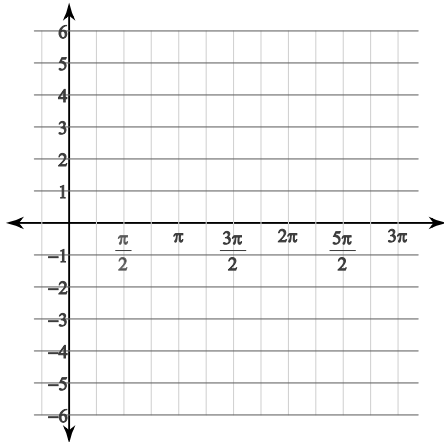


$$44) y = 3 \cos (2\theta - 315) - 2$$

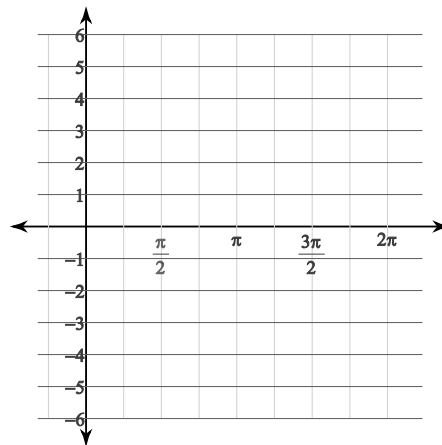


Graph each function using radians.

$$45) y = \cos \theta$$



$$46) y = 2 \sin \left(2\theta + \frac{\pi}{2} \right) - 2$$



Answers to Practice for Q3OBQ4 and Quiz 4.

1) 210°

2) 315°

3) $\frac{\pi}{2}$

4) $\frac{5\pi}{3}$

5) 20°

6) 40°

7) $\frac{5\pi}{18}$

8) $\frac{\pi}{9}$

9) $\frac{5\pi}{6}$

10) $\frac{2\pi}{3}$

11) -630°

12) -600°

13) 44.4°

14) 16 km

15) $-\frac{\sqrt{3}}{3}$

16) 1

17) 1

18) $\frac{\sqrt{3}}{2}$

19) -2

20) 0

21) 18°

22) 70°

23) 27°

24) 35°

25) 46°

26) 37°

27) Amplitude: 7
Period: 120°

28) Amplitude: 5
Period: 60°

29) Amplitude: $\frac{1}{3}$
Period: 90°

30) Amplitude: 7
Period: 1080°

31) Amplitude: 4
Period: 90°

32) Amplitude: $\frac{1}{3}$
Period: $\frac{360^\circ}{7}$

33) Amplitude: 9
Period: 120°

34) Amplitude: 4
Period: 1080°

35) Amplitude: 2
Period: $\frac{\pi}{4}$

36) Amplitude: $\frac{1}{3}$
Period: $\frac{2\pi}{5}$

37) Amplitude: $\frac{1}{4}$
Period: $\frac{\pi}{4}$

38) Amplitude: 7
Period: $\frac{\pi}{3}$

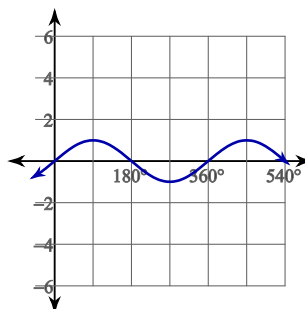
39) Amplitude: 1
Period: $\frac{\pi}{2}$

40) Amplitude: $\frac{1}{3}$
Period: $\frac{2\pi}{7}$

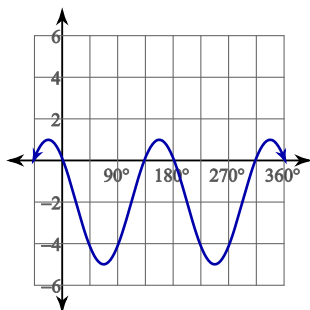
41) Amplitude: $\frac{1}{6}$
Period: 12π

42) Amplitude: 6
Period: π

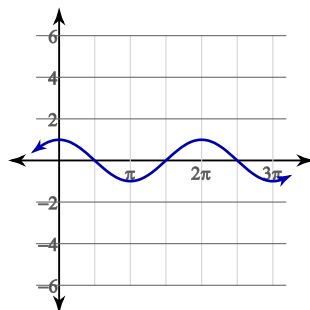
43)



44)



45)



46)

