Name _____ Date _____

10.2 Extra Practice

Odds

In Exercises 1–6, draw an angle in standard position have the given measure.

1. $260°$ **2.** $400°$ **3.** $-200°$

In Exercises 4–6, find one positive angle and one negative angle that are coterminal with the given angle

4. $225°$ **5.** $-420°$ **6.** $-990°$

In Exercises 7–12, convert the degree measure to radians or the radian measure to degrees.

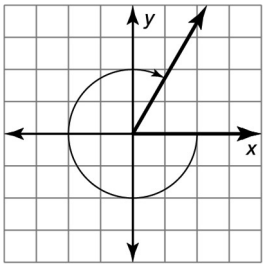
7. $200°$ **8.** $1°$ **9.** $-475°$

10. $\frac{3\pi}{10}$ **11.** $-\frac{5\pi}{12}$ **12.** 6

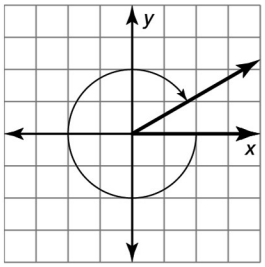
In Exercises 13–15, match the angle measure with the angle.

13. $-300°$ **14.** $\frac{5\pi}{3}$ **15.** $-\frac{11\pi}{6}$

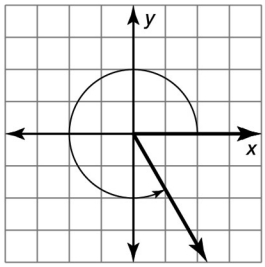
A.



B.



C.



16. There are 60 minutes in 1 degree of arc, and 60 seconds in 1 minute of arc. The notation $50° 30' 10''$ represents an angle with a measure of $50°$, 30 minutes, and 10 seconds.

a. Write the angle measure $160.44°$ using the notation above.

b. Write the angle measure $98° 15' 45''$ to the nearest hundredth of a degree.

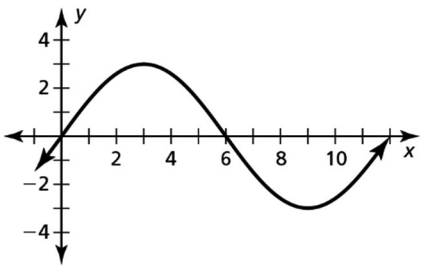
Name _____ Date _____

10.4 Extra Practice

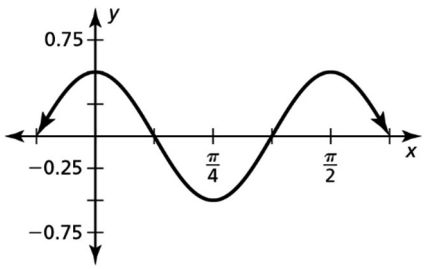
Odds

In Exercises 1 and 2, identify the amplitude and period of the graph of the function.

1.



2.



In Exercises 3–6, identify the amplitude and period of the function. Then graph the function and describe the graph of *g* as a transformation of the graph of its parent function.

3. $g(x) = 4 \sin x$

4. $g(x) = \cos \pi x$

5. $g(x) = 5 \sin 4x$

6. $g(x) = \frac{1}{4} \cos 2x$

7. Write an equation of the form $y = a \cos bx$, where $a > 0$ and $b > 0$, so that the graph has the given amplitude and period.

a. amplitude: 1
period: 3

b. amplitude: 3
period: 4

c. amplitude: 12
period: 2π

d. amplitude: $\frac{1}{3}$
period: π

In Exercises 8–11, graph the function.

8. $g(x) = \cos x + 3$

9. $g(x) = 2 \sin x - 1$

10. $g(x) = \sin \frac{1}{2}(x - \pi) - 2$

11. $g(x) = \cos \frac{1}{2}(x + \pi) - 4$

In Exercises 12 and 13, write a rule for *g* that represents the indicated transformations of the graph of *f*.

12. $f(x) = \frac{1}{2} \cos 3x$; translation 2 units up, followed by a reflection in the line $y = 2$

13. $f(x) = \frac{1}{3} \sin \pi x$; translation 3 units down, followed by a reflection in the line $y = -3$