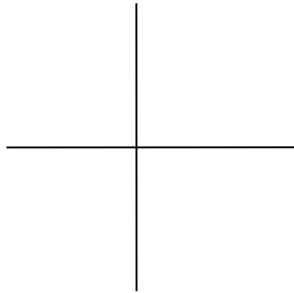


Advanced Algebra
6.4-6.6 Review

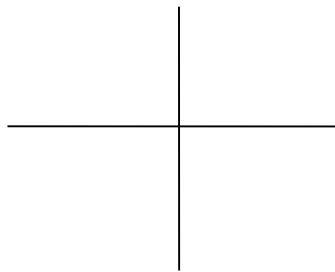
Name: _____
Hour: _____

Draw the angle with the given radian measure in standard position.

1. 7 radians



2. -2.5 radians



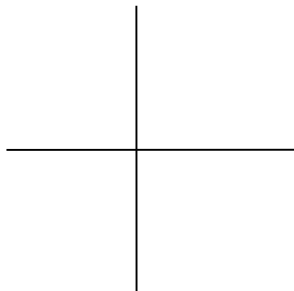
3 and 4. Complete the following for questions

a.) Draw the angle with the given measure in standard position.

b.) Find the reference angle.

c.) Give a positive and negative coterminal angle for each.

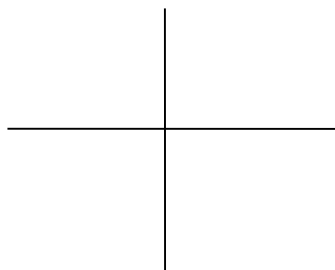
3. $\frac{8\pi}{5}$



b. _____

c. _____

4. $-\frac{5\pi}{6}$



b. _____

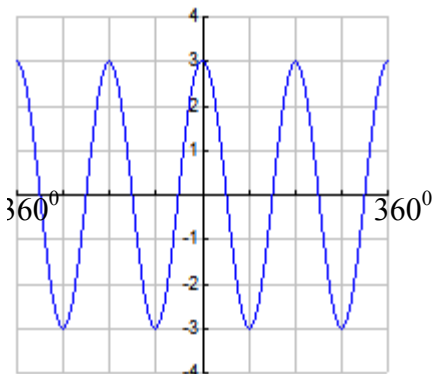
c. _____

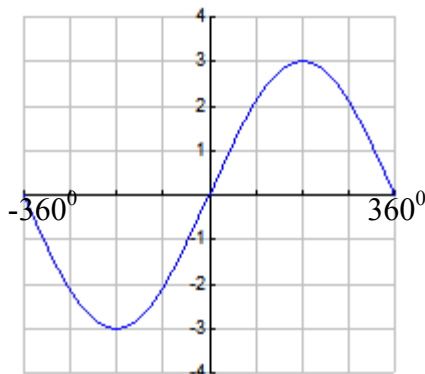
Match the function with its graph.

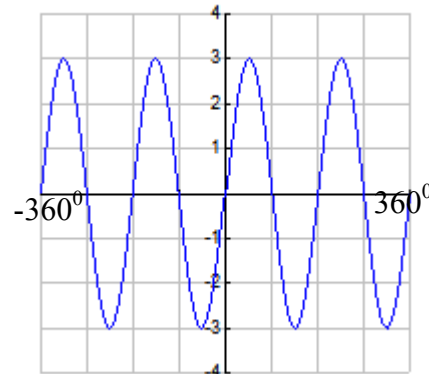
5. $y = 3 \sin 2x$

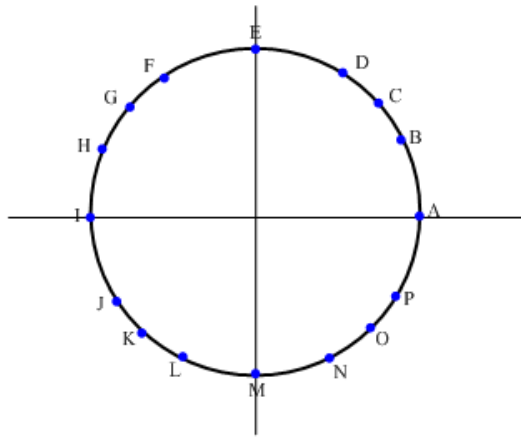
6. $y = 3 \sin \frac{1}{2}x$

7. $y = 3 \cos 2x$









8. Find the degree measure of angle L: _____

9. Find the radian measure of angle P: _____

10. Find the exact values

a. $\cos 120 =$ _____

b. $\sin \frac{2\pi}{3} =$ _____

c. $\tan(-135) =$ _____

d. $\cos 5\pi =$ _____

e. $\tan \frac{17\pi}{6} =$ _____

f. $\sin(-270) =$ _____

11. Find the exact value, in degrees ($0 \leq \theta \leq 360$), of $\sin^{-1}\left(-\frac{1}{2}\right) =$ _____ and _____.

12. Find the exact value, in radians ($0 \leq \theta \leq 2\pi$), of $\tan^{-1}(\sqrt{3}) =$ _____ and _____.

13-18. Use (= or < or >) to make a true statement

13. $\sin 120$ _____ $\cos 330$

14. $\tan 80$ _____ $\tan 290$

15. $\sin\left(-\frac{2\pi}{3}\right)$ _____ $\sin\left(\frac{2\pi}{3}\right)$

16. $\cos\left(-\frac{2\pi}{3}\right)$ _____ $\cos\left(\frac{2\pi}{3}\right)$

17. $\sin 70$ _____ $\cos 275$

18. $\sin(\text{any angle})$ _____ $\tan 46$

Write an equation of the graph described. (#19-22)

19. The graph of $y = -2\sin 5x$ translated down 4 units and left 180° .

Equation: _____

20. The graph of $y = \frac{1}{4}\cos 2x$ translated up 4 units and then reflected in the x-axis.

Equation: _____

21. Write a function whose graph has the given characteristics.

parent: $y = \cos x$

phase shift: right 30°

amplitude = 3

period: 720°

vertical shift: up 5

Equation: _____

22. Write a function whose graph has the given characteristics.

parent: $y = \sin x$

phase shift: left 60°

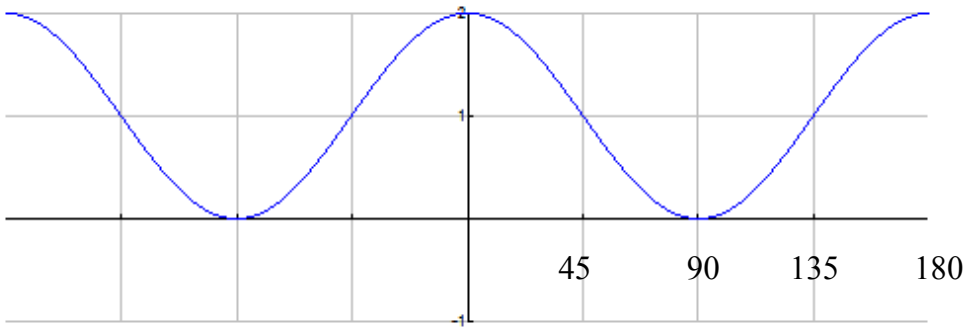
amplitude = 3

period: 90°

vertical shift: down 3

Equation: _____

23. Use the graph to answer the following.

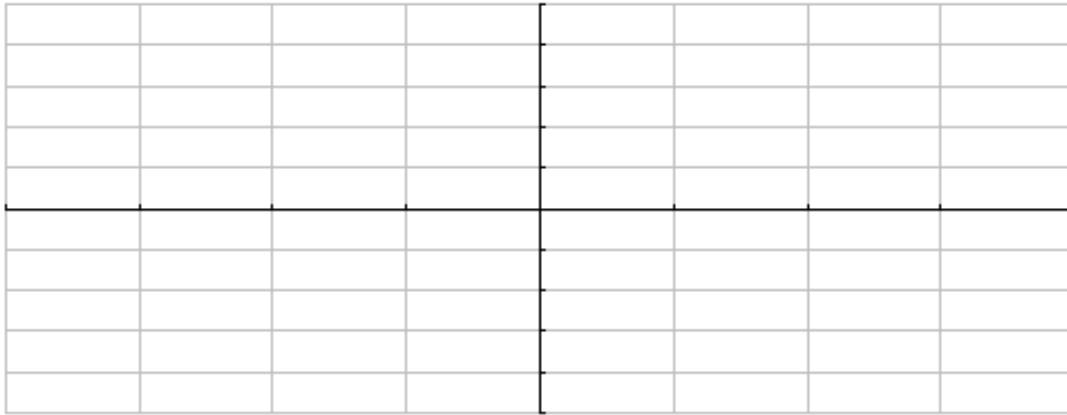


Equation (write as a cosine function)

Equation (write as a sine function)

24. Graph $y = 2\cos(x + 90) + 1$ from $-360 \leq \theta \leq 360$.

Period: _____ Amplitude: _____ Horizontal Shift: _____ Vertical Shift: _____



25. Graph $y = -3\sin\left(\frac{1}{2}(x - 180)\right) + 2$ from $-360 \leq \theta \leq 360$.

Period: _____ Amplitude: _____ Horizontal Shift: _____ Vertical Shift: _____

