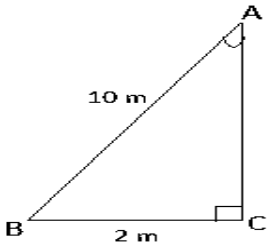
Math 3 Honors – Unit 7 Test Review

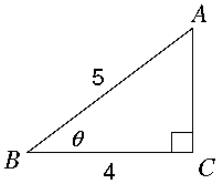
Name: _____ Date: _____

1. Find the 6 trig ratios for A.

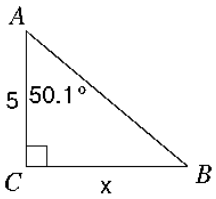


Find x or θ.

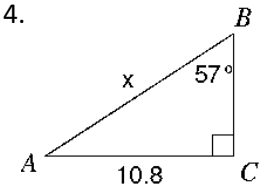
2.



3.



4.



Find a coterminal angle between $0°$ and $360°$ for each.

5. $1081°$

6. $-682°$

7. $\frac{17\pi}{4}$

8. $\frac{-10\pi}{3}$

Find the reference angle for each.

9. $201°$

10. $280°$

11. $483°$

12. $-130°$

13. $\frac{5\pi}{4}$

14. $\frac{15\pi}{6}$

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

16. $\frac{7\pi}{4}$

Find the exact value of each.

17. $\sin\frac{11\pi}{6}$

18. $\cos -225°$

19. $\csc 45°$

20. $\tan\frac{7\pi}{6}$

21. $\sec\frac{-2\pi}{3}$

22. $\cot 180°$

Change to radians. (exact answer)

23. $310°$

24. $70°$

Change to degrees. (round to nearest thousandth)

25. $\frac{8\pi}{9}$ radians

26. 52 radians

27. If you start at (-1, 0) on the unit circle and move $\frac{7\pi}{6}$ radians clockwise, exactly what angle (radians) would you be at?

28. Fill out the following information for the graph below. If any of these values are zero simply state that.

Amplitude:_____

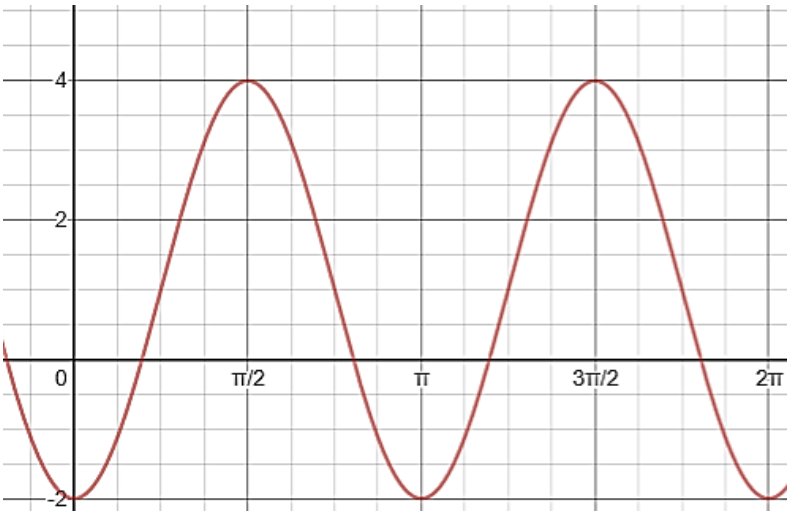
Period:_____

Frequency (b):_____

Midline:_____

Phase Shift:_____

f(x)=_____



29. Fill out the following information for the graph below. If any of these values are zero simply state that.

Amplitude:_____

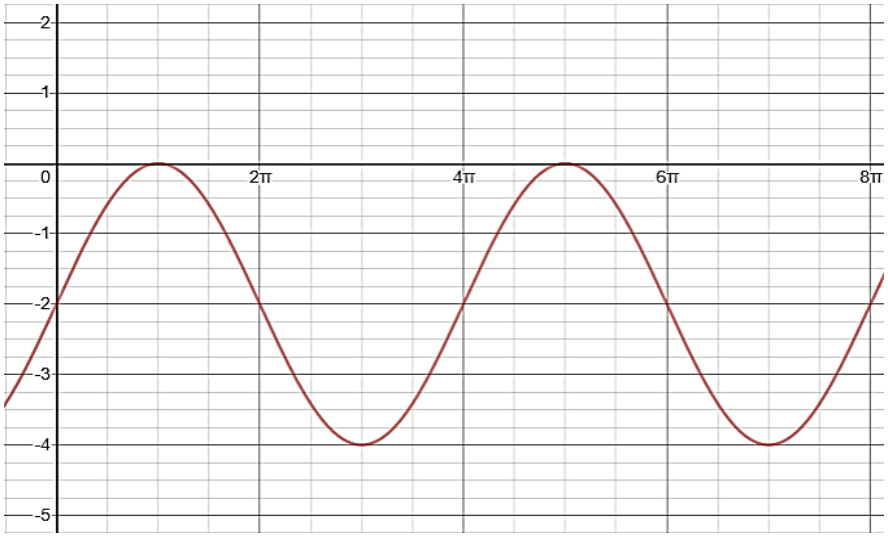
Period:_____

Frequency (b):_____

Midline:_____

Phase Shift:_____

f(x)=_____



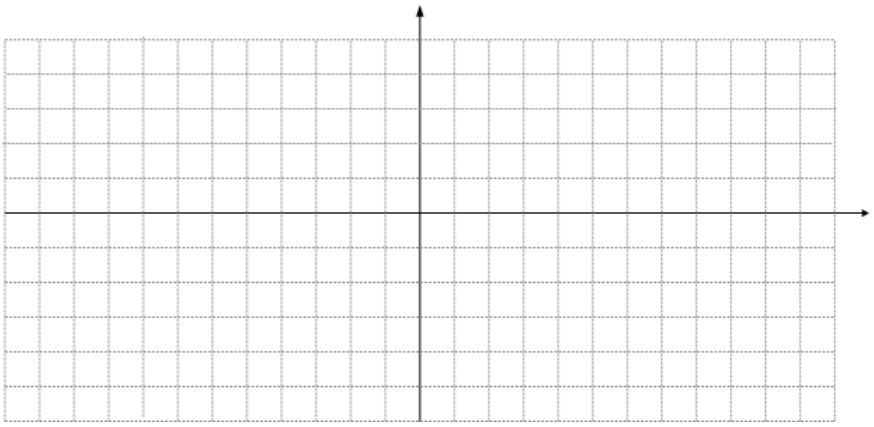
Write the equation for the following.

30. y = cosx, with an amplitude of 4, a vertical shift of 6, a period of $\frac{\pi}{3}$, and a phase shift of $-\frac{\pi}{6}$

31. y = sinx, flipped over x-axis, with an amplitude of 2, a vertical shift of 3, a period of 3π, and a phase shift of $\frac{9\pi}{4}$

Directions: Sketch **one cycle** of the following sin or cos function. Label the amplitude, midline, period, and phase shift. If any of these values are zero simply state that next to your graph. Label the x and y-axis.

32. $f(\theta) = 2\sin(\theta)$



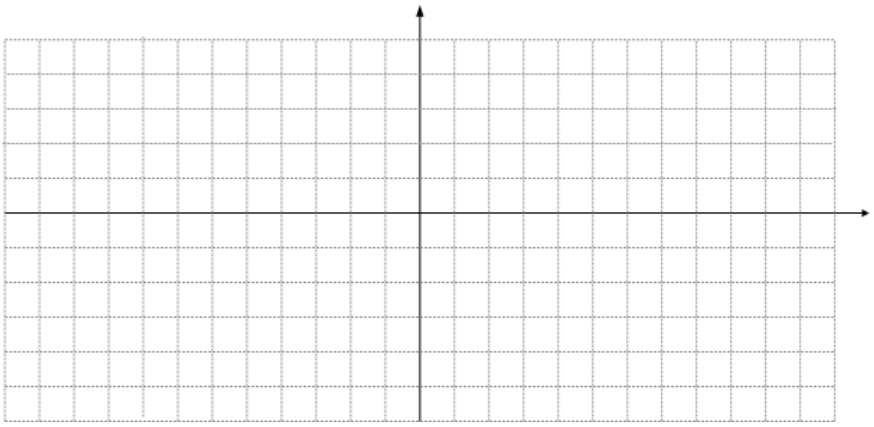
Amplitude: _____

Midline: _____

Period: _____

Phase Shift: _____

33. $f(\theta) = -4\cos(\theta) - 1$



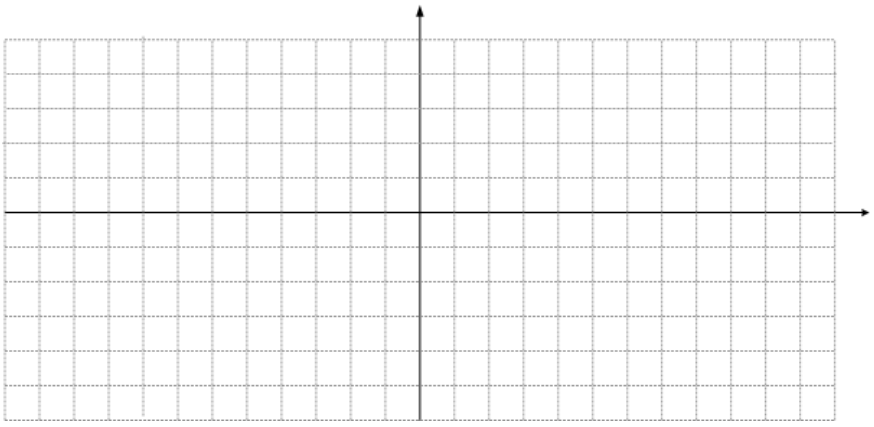
Amplitude: _____

Midline: _____

Period: _____

Phase Shift: _____

34. $f(\theta) = \cos\left(\frac{1}{2}(\theta - 2\pi)\right) + 3$



Amplitude: _____

Midline: _____

Period: _____

Phase Shift: _____