Algebra 2 Final Exam Review Chapter 13,14 Spring 2014

1. Convert each radian measure into degrees. Round to the nearest hundredth when needed.

a) $\frac{9\pi}{4}$ b) $\frac{17\pi}{6}$

2. Convert each degree measure into radians.

a) $780°$ b) $75°$

3. Find the exact values of each using the Unit Circle.

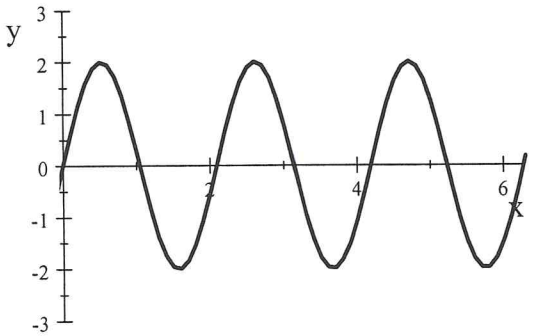
a) $\sin 810°$ b) $\cos(-450)°$ c) $\tan\frac{5\pi}{3}$ d) $\cos\frac{29\pi}{6}$ e) $\sin(-120°)$

f) $\cos 15\pi$ g) $\sin 270°$ h) $\tan\frac{7\pi}{6}$ i) $\cos\frac{3\pi}{4}$ j) $\tan 315°$

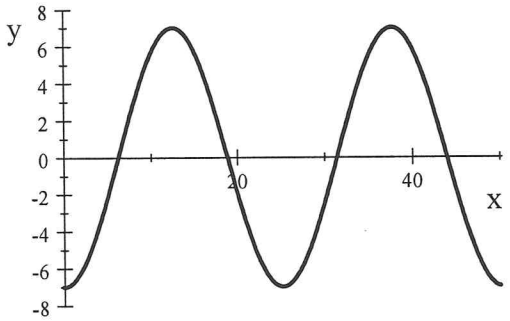
4. State the amplitude, period, equation of the midline, and phase shift of each function. Give the period and phase shift in radians.

a) $y = 9\sin\frac{2}{3}(x+\frac{\pi}{6})-5$ b) $y = -2\cos 7(x-\frac{3\pi}{4})+8$

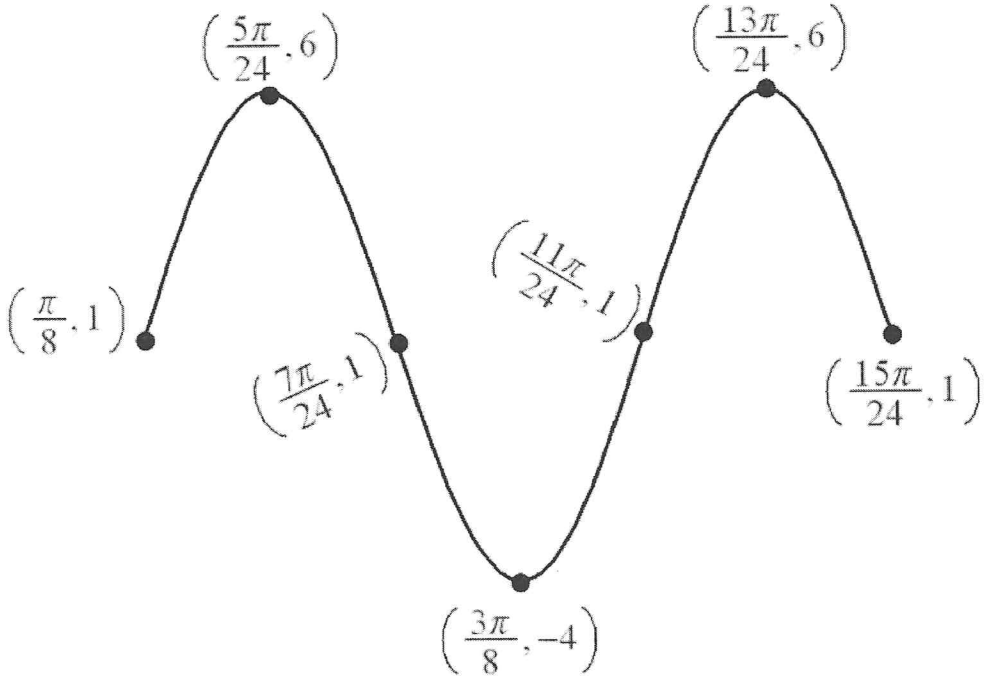
5. Write a Sine equation of this function. The window is 0 to 2π



6. Write a Cosine equation of this function. The window is 0 to 16π



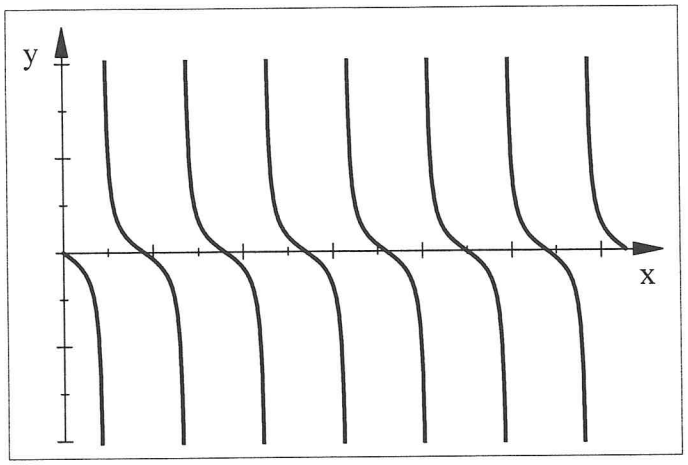
7. Write both a Sine and Cosine equation for this function.



8. Find both a positive and a negative coterminal angle for each given angle. Give the answer in the same form as the original angle.

a) $\theta = 875°$ b) $\theta = \frac{27\pi}{8}$

9. Write the equation for this Tangent Function. The Window is 0 to 2π



10. Given $Csc\theta = \frac{17}{15}$ Find the other five trig ratios of θ

11. Find the value of each to the nearest hundredth.

a) Sec178° b) Cot $\frac{3\pi}{11}$