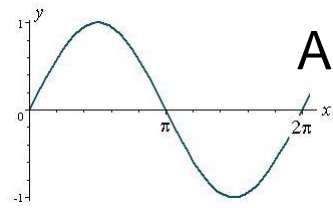Name:_____
Precalculus
Review through 5.4
Trig Functions

Convert these degree measures into radian measures.

1) 200

2) 320

Convert these radian measures into degree measures.

3) $\dfrac{3\pi}{5}$

4) $\dfrac{3\pi}{8}$

5) Convert 50 RPM's into rad/sec

6) Convert 30π rad/sec into RPM's

7) Find the arc length of a circle if its central angle is 40 degrees and the radius is 12 feet.

8) Find the linear velocity of the outer edge of a 26-inch diameter bicycle tire if it is spinning at a rate of 42 RPM's. Write your answer in feet/sec.

9) If the Llano River causes a 12-foot water wheel to turn at 4 RPM's, what is the speed of the water? Write your answer in ft/sec.

10) A point on the terminal side of an angle θ is given. Find the exact values of all six trig functions. in ratio form.

   (2,− 6)

   a) $\sin\theta =$

   b) $\cos\theta =$

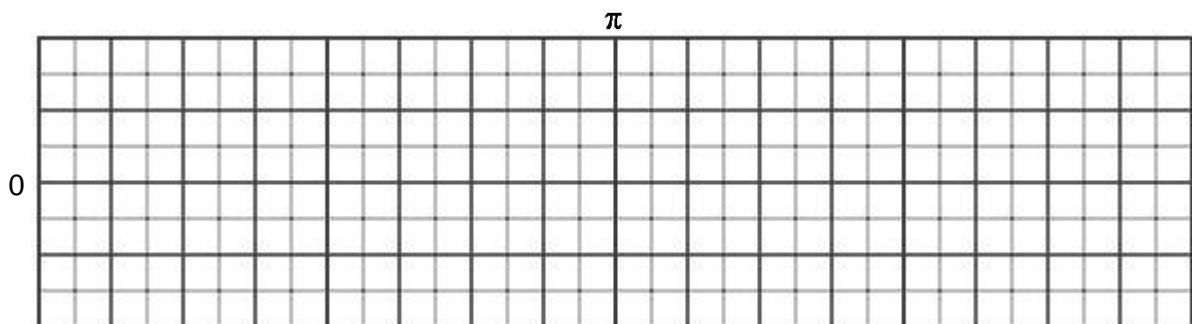   c) $\tan\theta =$

   d) $\cot\theta =$

   e) $\sec\theta =$

   f) $\csc\theta =$

Write in standard form, find the amplitude, period, phase shift, and vertical displacement, then graph across the entire coordinate system.

16) $y = \sin(2x + \dfrac{\pi}{4})$

   Standard form: _____

   A = _____   Period = _____   PS = _____   VertDisp = _____

π

0

Fill in the unit circle