Classwork 17
Intermediate Algebra MTH 35
Topic: Degrees, radians and circles

Name: _____

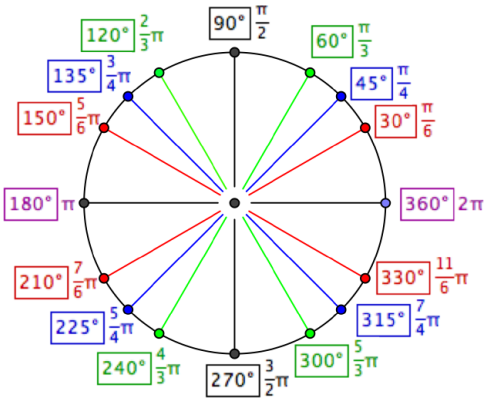
π radians $= 180^\circ$ e.g. $\pi/2$ radians $= 90^\circ$, and $270^\circ = \frac{270}{180}\pi$ radians $= \frac{3}{2}\pi$ radians

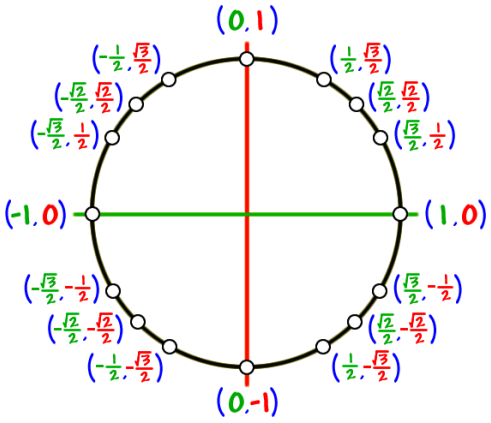
1. Convert from degree to radians.

   (a) $270^\circ =$ _____
   (b) $120^\circ =$ _____
   (c) $-120^\circ =$ _____
   (d) $-135^\circ =$ _____
   (e) $480^\circ =$ _____
   (f) $540^\circ =$ _____

2. Convert from radians to degrees.

   (a) $\pi/4 =$ _____
   (b) $3\pi/2 =$ _____
   (c) $-5\pi/6 =$ _____
   (d) $-4\pi/3 =$ _____
   (e) $8\pi/3 =$ _____
   (f) $-3\pi/2 =$ _____





3. Using the figures above, find the terminal point on the unit circle determined by the real numbers (angles):

   (a) $t = \pi/2$ point= _____
   (b) $t = 3\pi/2$ point= _____
   (c) $t = -\pi/2$ point= _____
   (d) $t = \pi/4$ point= _____
   (e) $t = 5\pi/4$ point= _____
   (f) $t = 5\pi/6$ point= _____
   (g) $t = -5\pi/3$ point= _____
   (h) $t = 8\pi/3$ point= _____
   (i) $t = -3\pi/4$ point= _____
   (j) $t = 13\pi/6$ point= _____