irfanedu.com

Unit Circle - Practice Worksheet

Name: _____ Date: _____

Instructions: For each problem, use the unit circle to find the exact value. Show your work where asked. No calculator needed.

1. What are the (cos , sin) coordinates at = 0 deg?

2. What are the (cos , sin) coordinates at = 90 deg?

3. Convert 180 deg to radians.

4. Convert 3pi/2 radians to degrees.

5. Find sin(30 deg).

6. Find cos(60 deg).

7. Find sin(225 deg). State the quadrant.

8. Find cos(300 deg). State the quadrant.

9. Find tan(135 deg) using sin/cos from the unit circle.

10. A point on the unit circle has coordinates (-sqrt(3)/2, 1/2). What angle (in degrees, 0 deg-360 deg) does this represent?

Answer Key

1. (1, 0)
2. (0, 1)
3. pi
4. 270 deg
5. 1/2
6. 1/2
7. -sqrt(2)/2; Quadrant III
8. 1/2; Quadrant IV
9. -1
10. 150 deg