NAME:_____

1. Use special right triangles to find the coordinates of the point of intersection of the angle $330°$ and the unit circle. Express your answer in fractions and radicals when necessary.

[A] $\left(-\dfrac{\sqrt{3}}{2}, \dfrac{1}{2}\right)$ [B] $\left(\dfrac{\sqrt{3}}{2}, -\dfrac{1}{2}\right)$

[C] $\left(\dfrac{2\sqrt{3}}{3}, -2\right)$ [D] $\left(-\dfrac{2\sqrt{3}}{3}, 2\right)$

2. Use special right triangles to find the coordinates of the point of intersection of the angle $-150°$ and the unit circle. Express your answer in fractions and radicals when necessary.

[A] $\left(-\dfrac{2\sqrt{3}}{3}, -2\right)$ [B] $\left(-\dfrac{\sqrt{3}}{2}, -\dfrac{1}{2}\right)$

[C] $\left(\dfrac{\sqrt{3}}{2}, \dfrac{1}{2}\right)$ [D] $\left(\dfrac{2\sqrt{3}}{3}, 2\right)$

3. Use special right triangles to find the coordinates of the point of intersection of the angle $240°$ and the unit circle. Express your answer in fractions and radicals when necessary.

4. Use special right triangles to find the coordinates of the point of intersection of the angle $-225°$ and the unit circle. Express your answer in fractions and radicals when necessary.

5. Use special right triangles to find the coordinates of the point of intersection of the angle $-315°$ and the unit circle. Express your answer in fractions and radicals when necessary.

6. Use special right triangles to find the coordinates of the point of intersection of the angle $45°$ and the unit circle. Round your answer to the nearest hundredth.

7. Use special right triangles to find the coordinates of the point of intersection of the angle $135°$ and the unit circle. Round your answer to the nearest hundredth.

8. Use special right triangles to find the coordinates of the point of intersection of the angle $-300°$ and the unit circle. Round your answer to the nearest hundredth.

9. Find the coordinates of the point of intersection with the unit circle of an angle of $610°$. Round coordinates to the nearest thousandth.

10. Compare the quantity in Column A with the quantity in Column B.
An angle of $420°$ intersects the unit circle at (x, y).

Column A	Column B
x	y

[A] The quantity in Column A is greater.

[B] The quantity in Column B is greater.

[C] The two quantities are equal.

[D] The relationship cannot be determined on the basis of the information supplied.

[1] B

[2] B

[3] $\left(-\dfrac{1}{2}, -\dfrac{\sqrt{3}}{2}\right)$

[4] $\left(-\dfrac{\sqrt{2}}{2}, \dfrac{\sqrt{2}}{2}\right)$

[5] $\left(\dfrac{\sqrt{2}}{2}, \dfrac{\sqrt{2}}{2}\right)$

[6] $(0.71, 0.71)$

[7] $(-0.71, 0.71)$

[8] $(0.50, 0.87)$

[9] $(-0.342, -0.940)$

[10] B