

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

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

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

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

[1] _____

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] $\left(-\frac{2\sqrt{3}}{3}, -2\right)$

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

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

[D] $\left(\frac{2\sqrt{3}}{3}, 2\right)$

[2] _____

3. 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.

[3] _____

4. 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.

[4] _____

5. 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.

[5] _____

6. 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] _____

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

[7] _____

8. 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.

[8] _____

[1] B

[2] B

[3] (0.71, 0.71)

[4] (0.50, 0.87)

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

[6] $\left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$

[7] $(-0.342, -0.940)$

[8] B