The Unit Circle:

Define the Radian as a Distance around a circle equal to the length of a curved radius

Also Define Radian as the measure of a Central Angle that subtends an Arc of length 1 Radian in Distance

One Radian $\approx 57.3°$. π radians = $180°$.

An angle in standard position has a vertex at $(0, 0)$ and its initial side along the positive x-axis.

From our studies in Geometry, we are familiar with:
the 30-60-90 Triangle with the opposite sides to these angles in the ratio $a : a\sqrt{3} : 2a$
the 45-45-90 Triangle with the opposite sides to thee angles in the ratio $a : a : a\sqrt{2}$

Our first 5 "Familiar Angles" in degrees are: $0°, 30°, 45°, 60°, 90°$

These 5 "Familiar Angles" in radians are: $0, \frac{\pi}{6}, \frac{\pi}{4}, \frac{\pi}{3}, \frac{\pi}{2}$

From this point on, all angles will by default be in Radians unless Degrees are specified, so if an angle is given as 12, we don't mean 12 Degrees, we mean 12 Radians.

Define the Wrapping Function that takes on Domain Elements that are Measures of Central Angles in Standard Position and Range Elements that are Points on the Unit Circle, whose equation is $x^2 + y^2 = 1$.

W(□) = (x, y)

Examples:
W(0) = (1, 0)

$$W\left(\frac{\pi}{6}\right) = \left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$$
$$W\left(\frac{\pi}{4}\right) = \left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$$
$$W\left(\frac{\pi}{3}\right) = \left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$$
$$W\left(\frac{\pi}{2}\right) = (0,1)$$

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NO CALCULATORS

1. $W\left(\frac{2\pi}{3}\right) =$

2. $W(\pi) =$

3. $W\left(\frac{5\pi}{6}\right) =$

4. $W\left(\frac{5\pi}{3}\right) =$

5. $W\left(\frac{7\pi}{6}\right) =$

6. $W\left(\frac{3\pi}{2}\right) =$

7. $W\left(\frac{\pi}{2}\right) =$

8. $W\left(\frac{11\pi}{6}\right) =$

9. $W\left(\frac{4\pi}{3}\right) =$

10. $W\left(\frac{5\pi}{3}\right) =$

11. $W(0) =$

12. $W(2\pi) =$