

The point $\left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$ is where the angle $\frac{2\pi}{3}$ radians or 120° intersects the unit circle. The x-coordinate gives you the value of the cosine function at that angle, and the y-coordinate gives you the value of the sine function at that angle. So:

$$\cos\left(\frac{2\pi}{3}\right) = -\frac{1}{2} \quad \text{and} \quad \sin\left(\frac{2\pi}{3}\right) = \frac{\sqrt{3}}{2}$$