

When you draw an angle in standard position and it intersects the unit circle at the point (x, y) , 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. Because the terminal side of the angle $\frac{3\pi}{2}$ intersects the unit circle at the point $(0, -1)$, this means that $\cos\left(\frac{3\pi}{2}\right) = 0$ and $\sin\left(\frac{3\pi}{2}\right) = -1$.