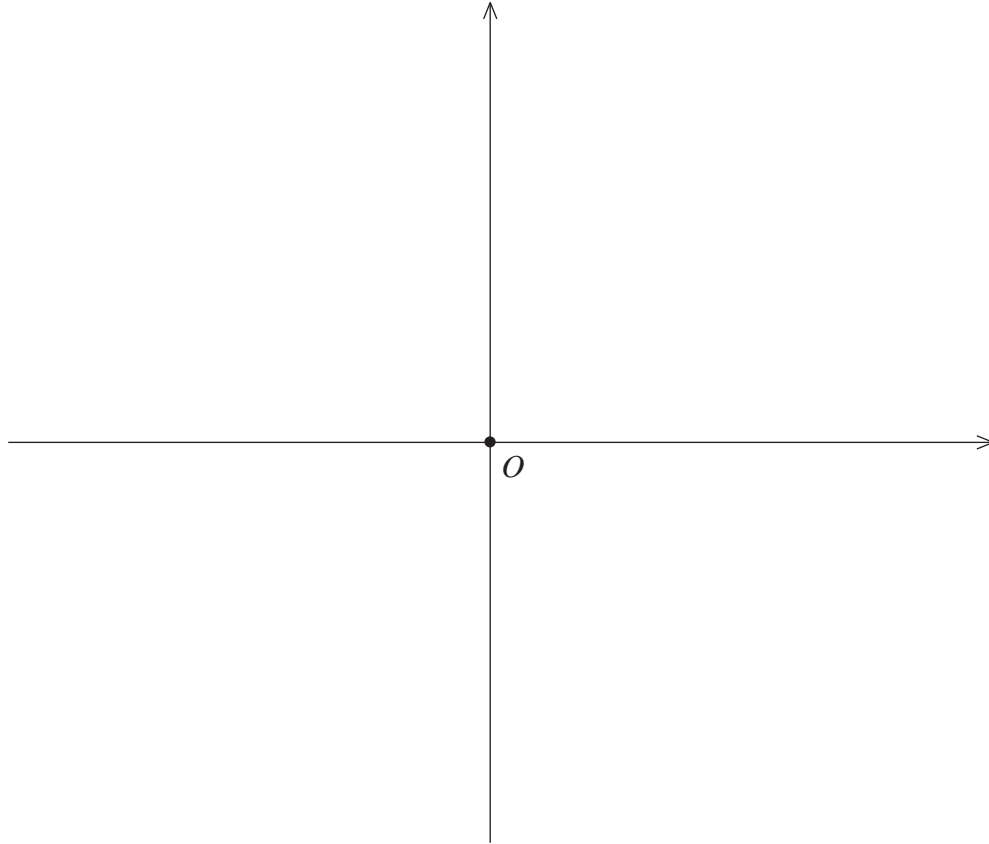


Quiz**Name**

1. Consider an x - y and a polar coordinate system simultaneously (with the polar coordinate system being O and the positive x -axis). Consider the polar function $r = f(\theta) = \frac{7}{2\sin\theta - 3\cos\theta}$. Plot the points corresponding to $\theta = 0$, $\theta = \frac{\pi}{2}$, and $\theta = \pi$ in the coordinate plane below.



2. Find the Cartesian equivalent of the equation $r = \frac{7}{2\sin\theta - 3\cos\theta}$. Use it to sketch the graph of the polar function $r = f(\theta) = \frac{7}{2\sin\theta - 3\cos\theta}$ carefully in the coordinate plane above.