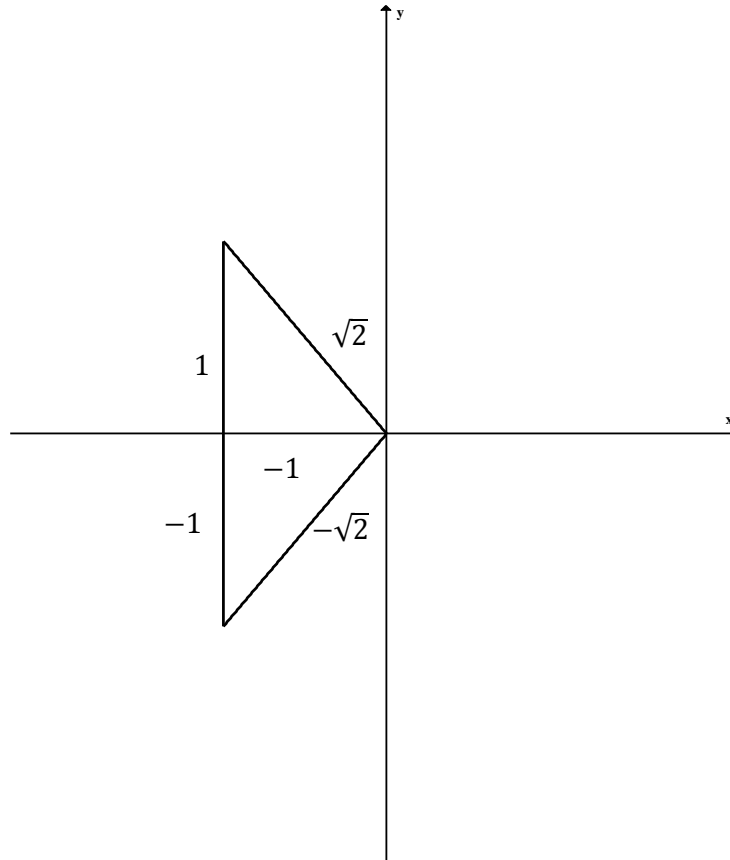


Name Solutions _____ Trigonometry, Quiz 4

Consider the angle θ in which $\cos(\theta) = -\frac{1}{\sqrt{2}}$.

1) Draw two triangles on the axis below that could represent this scenario.



2) Find $\cos^{-1}\left(-\frac{1}{\sqrt{2}}\right)$.

$$\cos^{-1}\left(-\frac{1}{\sqrt{2}}\right) = 135^\circ$$

Note that there are two angles in which $\cos(\theta) = -\frac{1}{\sqrt{2}}$, but for the inverse we only take the angle that is in quadrant *I* or *II*.