The unit circle.

The unit circle allows us to determine the values of sin (θ) and cos (θ), for the common angles, 0, $\frac{\pi}{6}$, $\frac{\pi}{4}$, $\frac{\pi}{3}$, $\frac{\pi}{2}$ and integer multilpe of these. (recall that $\theta = 0$ corresponds to the posative $x-$axis, and as θ increases positively, you move counter - clockwise around the circle). For any angle, θ, the corresponding point on the unit circle is $(x, y) = (\cos(\theta), \sin(\theta))$. For the common angles in the first quadrant, the important points are : $(1, 0) = (\text{Cos}(0), \sin(0))$,

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

$\left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right) = \left(\cos\left(\frac{\pi}{3}\right), \sin\left(\frac{\pi}{3}\right)\right)$ and $(0, 1) = \left(\text{Cos}\left(\frac{\pi}{2}\right), \sin\left(\frac{\pi}{2}\right)\right)$. Use the symmetry of the unit circle to find the values of sine and cosine for the remaining angles.