You may have correctly determined that the reference angle is  $60^{\circ}$  and then confused sine with cosine. To find the correct value of  $\sin 240^{\circ}$  you must find the value of  $\sin 60^{\circ}$  and then determine the correct sign. To determine the correct sign, use the signs of *x* and *y* in the third quadrant, remembering that:  $\sin \theta = \frac{y}{1}$