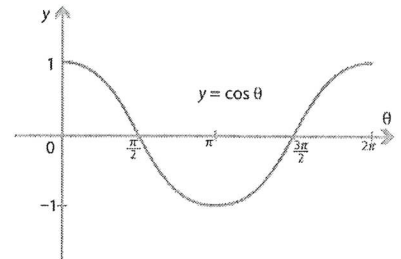
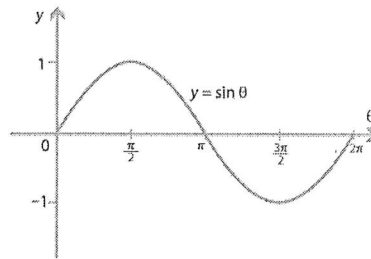
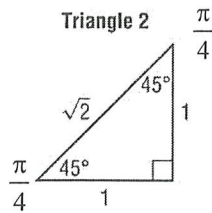
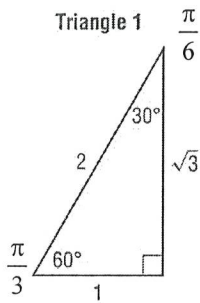


Recall the two special right triangles, and the graphs for sine and cosine.

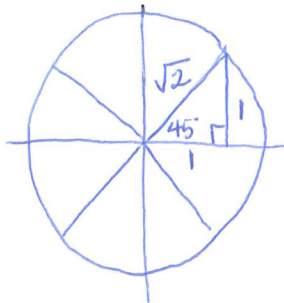


Ex. 1. Use the special triangles or graphs above to determine the exact value of each trig ratio.

a)  $\sin \frac{\pi}{4}$

$\downarrow$   
 $\frac{O}{H}$

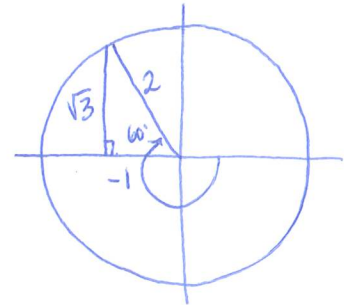
$= \frac{1}{\sqrt{2}}$



b)  $\cos(-240^\circ)$

$\downarrow$   
 $\frac{A}{H}$

$= \frac{-1}{2}$



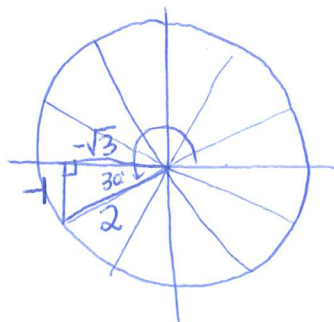
c)  $\sec \frac{7\pi}{6}$

$\downarrow$   
 $\sec \theta = \frac{1}{\cos \theta}$

$\cos \theta = \frac{A}{H}$

$= \frac{-\sqrt{3}}{2}$

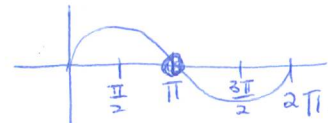
$\Rightarrow \sec \theta = \frac{2}{-\sqrt{3}}$



d)  $\sin \pi$

*\* use the graph!*

$\oplus$  not a triangle!



$\sin \pi = 0$