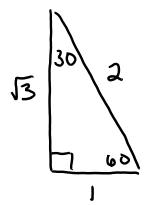
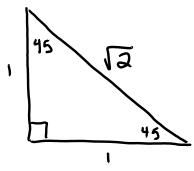


## Trigonometry to commit to memory:

Ratio of side lengths for common triangles:



Radians to degrees:

$$\pi = 180^\circ$$

$$\frac{\pi}{4} = 45^\circ$$

$$\frac{\pi}{2} = 90^\circ$$

$$\frac{\pi}{6} = 30^\circ$$

$$\frac{\pi}{3} = 60^\circ$$

Basic trig ratios:

SOH

$$\csc x = \frac{1}{\sin x}$$

CAH

$$\cancel{\csc x} = \frac{1}{\cos x}$$
  
*Sec(x)*

TOA

$$\cot x = \frac{1}{\tan x}$$

Basic trig identities:

$$\tan x = \frac{\sin x}{\cos x} \quad \cot x = \frac{\cos x}{\sin x}$$

$$\sin^2 x + \cos^2 x = 1$$

$$1 + \cot^2 x = \csc^2 x$$

$$\tan^2 x + 1 = \sec^2 x$$