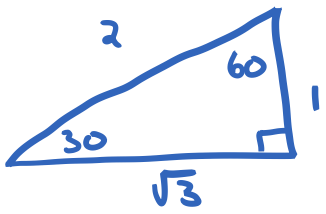
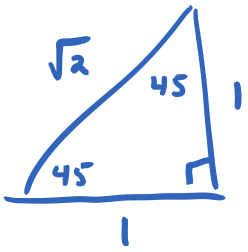
Algebra 2 CC
Right Triangle Practice

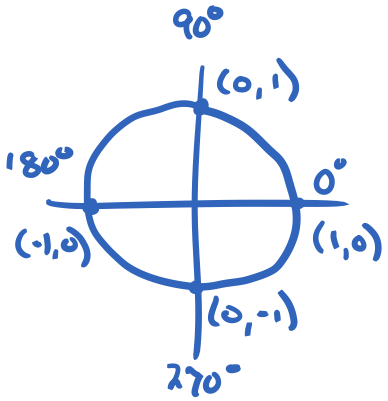
Name _____

SOH CAH TOA

CSC SCC COT




x → cos

y → sin

$\frac{y}{x}$ → tan

1.) $\sin 45^\circ$

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

2.) $\cos 60^\circ$

$\frac{1}{2}$

3.) $\tan 30^\circ$

$\frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$

4.) $\sec 30^\circ$

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

5.) $\cot 30^\circ$

$\sqrt{3}$

6.) $\csc 45^\circ$

$\sqrt{2}$

7.) $\sin 90^\circ$

1

8.) $\cos 180^\circ$

$-1$

9.) $\tan 270^\circ$

$\frac{1}{0} = \text{Ø}$

10.) $\cos 45^\circ$

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

11.) $\sin 60^\circ$

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

12.) $\csc 270^\circ$

$-1$

13.) $\sec 60^\circ$

2

14.) $\cos 0^\circ$

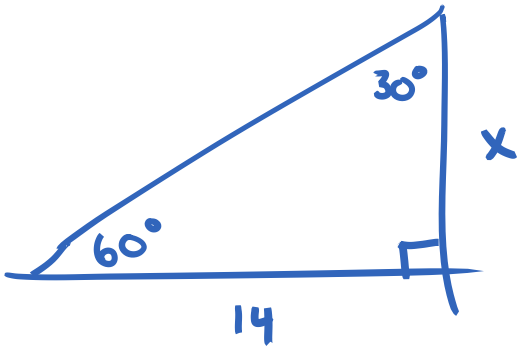
1

15.) $\cot 90^\circ$

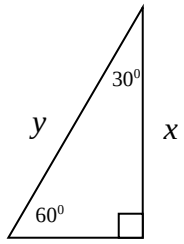
$\frac{0}{1} = 0$

16.) You are standing 14 feet from a telephone pole. The angle of elevation from the ground to the top of the telephone pole is $60^\circ$. What is the ***exact height*** of the telephone pole?

$x = 14\sqrt{3}$ feet



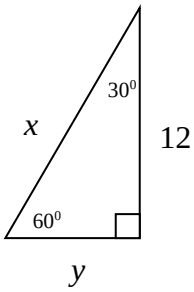

17.)




$x = 12\sqrt{3}$

$y = 24$

18.)




$\frac{12}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{12\sqrt{3}}{3} = 4\sqrt{3}$

$x = 8\sqrt{3}$

$y = 4\sqrt{3}$