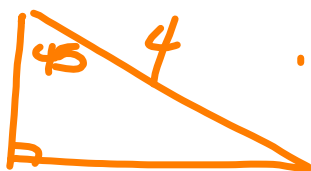
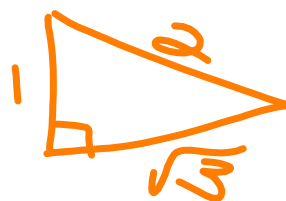
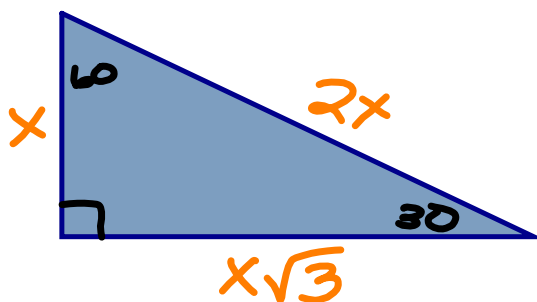
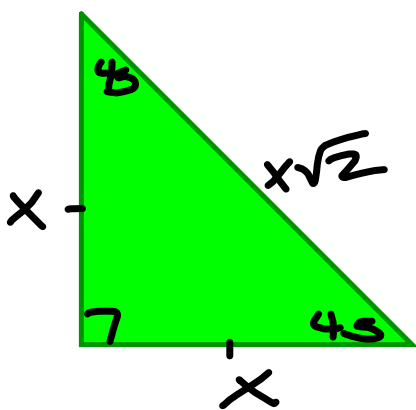
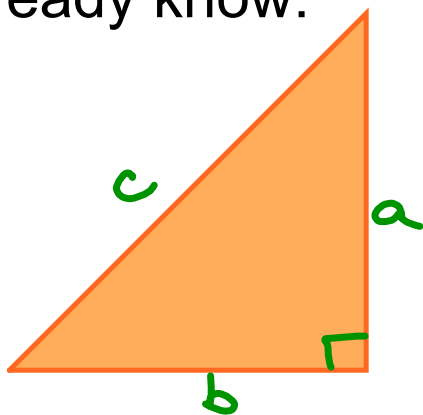
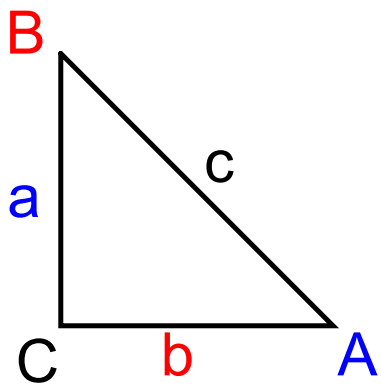


# Trigonometric Functions on the Unit Circle

What you already know:



$$\frac{4}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{4\sqrt{2}}{2} = 2\sqrt{2}$$

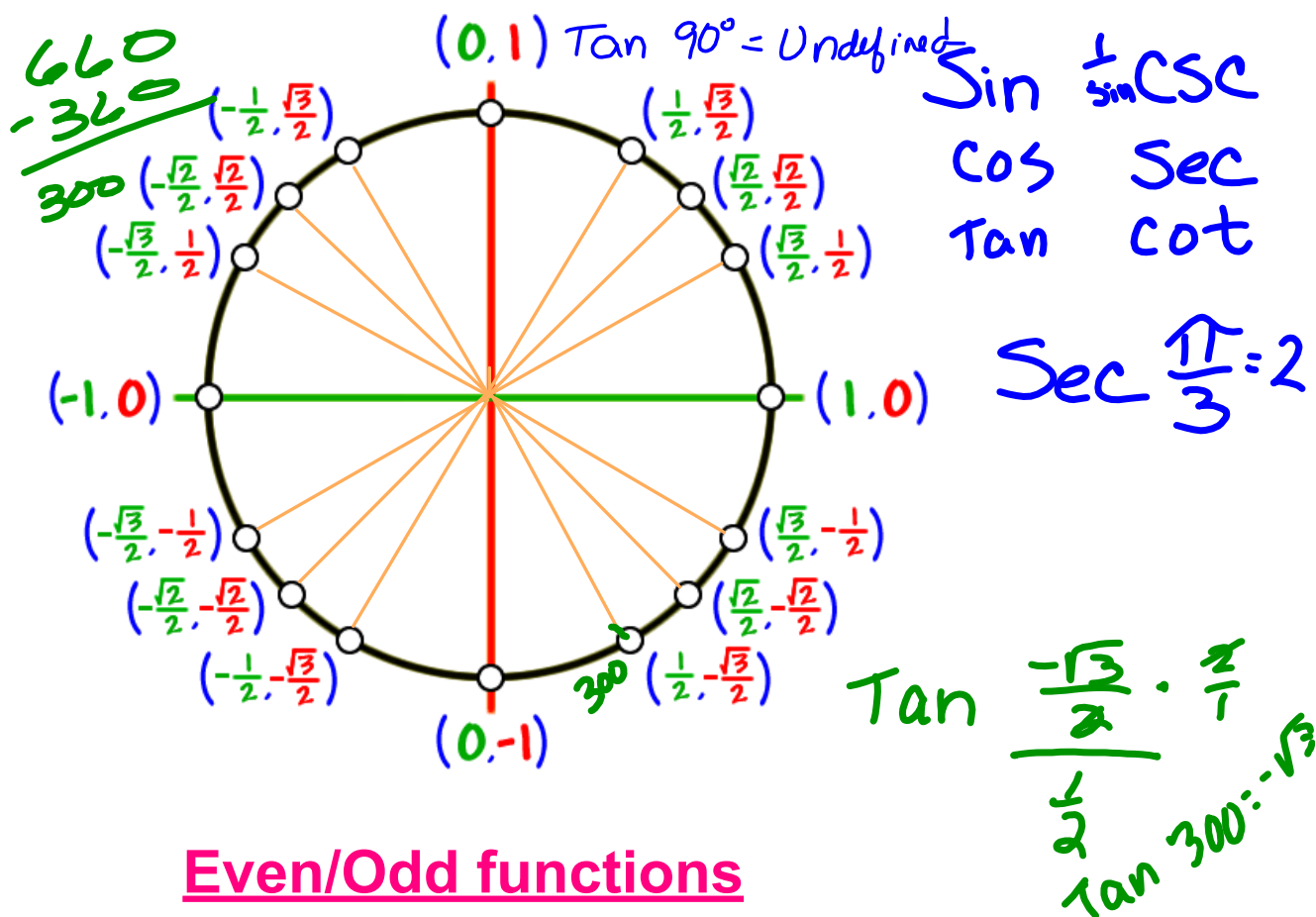


## Trig Functions on the Unit circle

NAME                      Notation                      Value

|                  |     |     |
|------------------|-----|-----|
| <b>Sine</b>      | sin | y   |
| <b>Cosine</b>    | cos | x   |
| <b>Tangent</b>   | tan | y/x |
| <b>Cosecant</b>  | csc | 1/y |
| <b>Secant</b>    | sec | 1/x |
| <b>Cotangent</b> | cot | x/y |

(cos<sup>x</sup>, sin<sup>y</sup>)



Even/Odd functions

\* cos and sec are **even** functions

$\cos(-x) = \cos(x)$        $\sec(-x) = \sec(x)$

\* everything else is **odd**

$\sin(-x) = -\sin(x)$

$\csc(-x) =$

$\tan(-x) =$

$\cot(-x) =$