

Harry S. Mills (Steve)

Homework -20% - Most of your time

WebAssign Tests - 25% - 2 tries. Take the best.

Written Tests - 25% - To Be Arranged MIDTERM & FINAL

Writing Projects - 20% - Written Test Materials

Orientation Activities - 10% - Email settings,  
Register on WebAssign, etc

**How to do Homework:**

**Main thing I do that's extra/special is all the videos I made for you, covering virtually every exercise on WebAssign.**

**WebAssign Tests are drawn from the same question bank, so my video help on homework doubles as help preparing for the WebAssign Tests.**

**The primary indicator of success is the amount of time you spend working problems.**

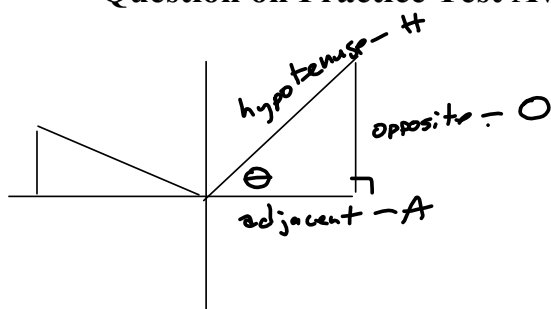
**Also, and maybe right up there with time, is WORKING SMART.**

**iNSTANT, ON-DEMAND HELP PLUS A TEACHER ON CALL 24/7.**

**970-290-0550**

**BAD TIMES: MW 8:15 - 9:30 AM AND MTWR 11:15 AM TO 12:20 PM**

## Question on Practice Test Availability.



sine:  $\sin(\theta) = \frac{O}{H}$

cosine:  $\cos(\theta) = \frac{A}{H}$

Tangent:  $\tan(\theta) = \frac{O}{A}$

 $\theta$  is the angle or argument.

Mnemonic: SOHCAHTOA  
"sock it toe uh"

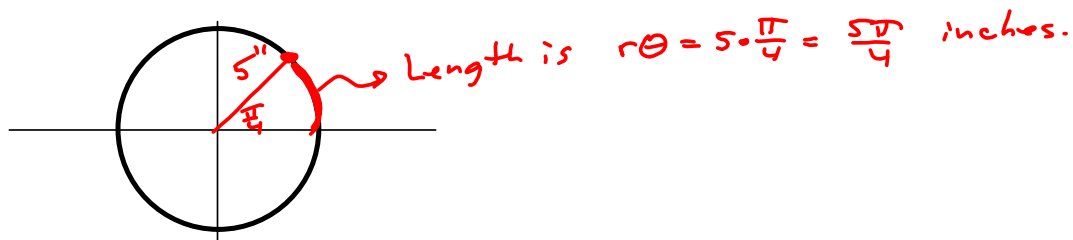
Radians make a/the connection between arc length and angles.

$360^\circ$  full circle

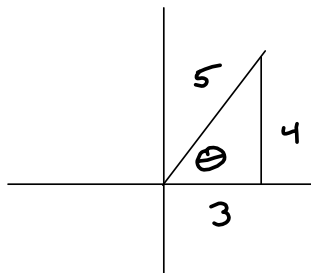
$2\pi$  (radians) full circle.

What's the circumference of a circle of radius  $r=1$ ?

Arc length:  $r\theta$ , where  $\theta$  is in radians.



## Special Triangles

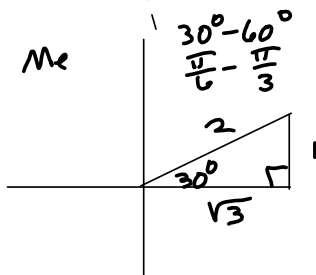


$$\sin \theta = \frac{4}{5}$$

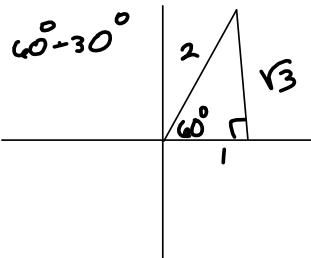
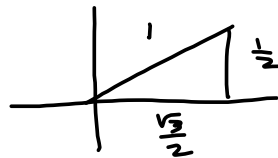
$$\cos \theta = \frac{3}{5}$$

$$\tan \theta = \frac{4}{3}$$

Me



Booiz:



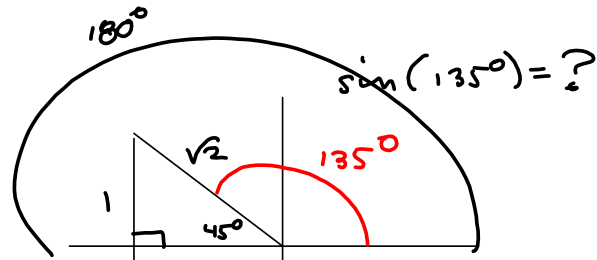
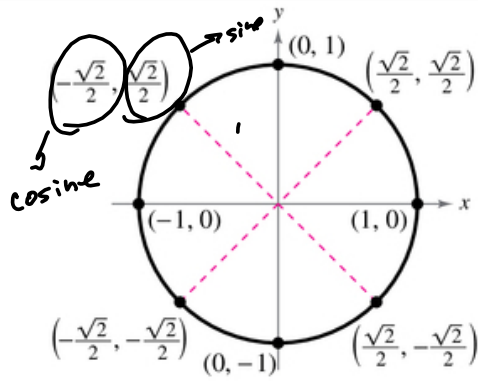
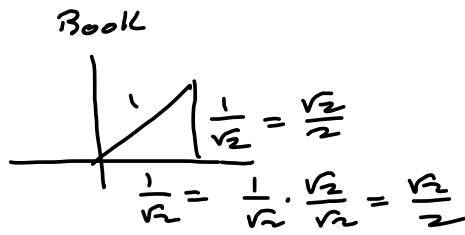
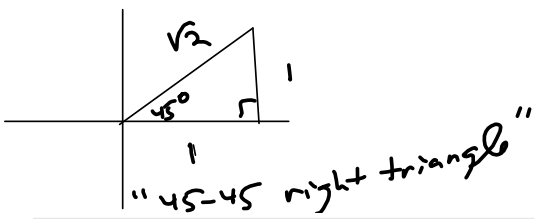
$$(60^\circ) \left( \frac{2\pi}{360^\circ} \right) = \frac{2\pi}{6} = \frac{\pi}{3}$$

When it's radians, we show no units.

In general, use  $\frac{\pi}{180^\circ}$

OR  $\frac{180^\circ}{\pi}$  as conversion factor,

depending on what direction you're going.



$$\sin 135^\circ = \frac{1}{\sqrt{2}}$$

$$\cos 135^\circ = -\frac{1}{\sqrt{2}}$$

$$\tan 135^\circ = -\frac{1}{1} = -1 !$$

We didn't get to quadrant angles.