Aim: What is the unit circle?

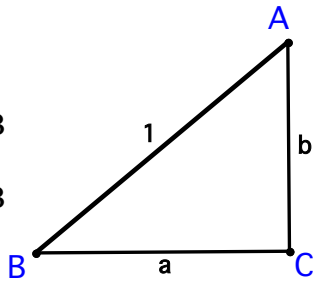
Get Ready:

Find:

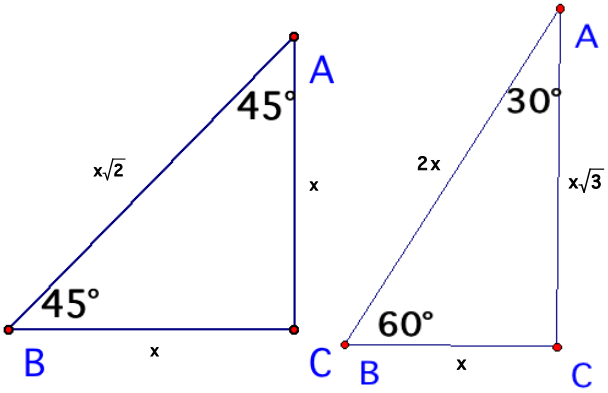
1) Sin B

2) Cos B

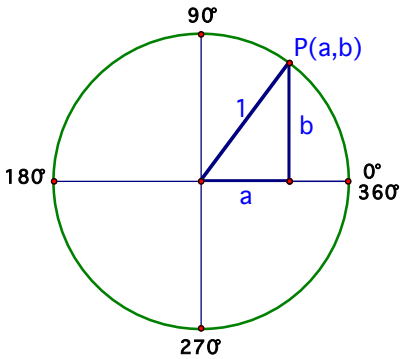
3) Tan B



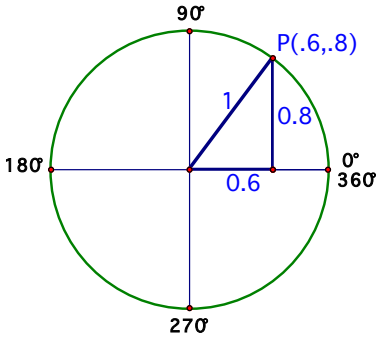
Solve for all six trig ratios of 30, 45, 60



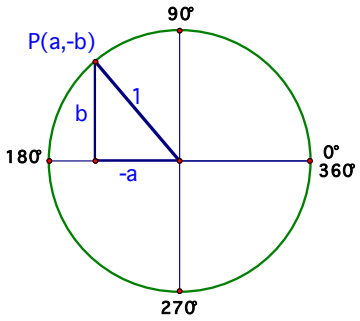
I.

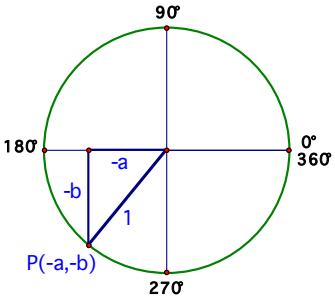


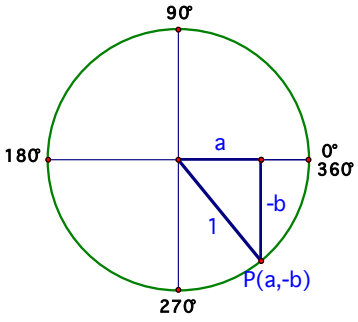
II.



III.

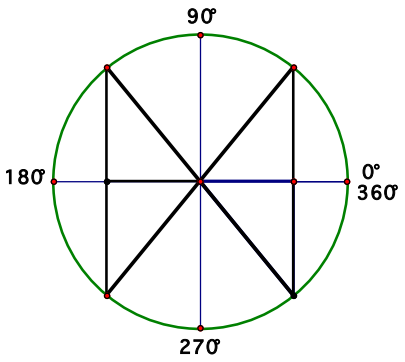




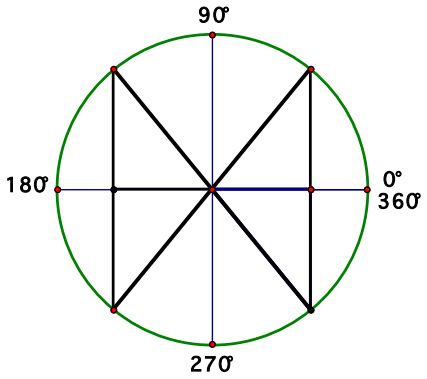


Aim: What is the unit circle?

IV.



V.



VI. Name the quadrant:

a. sin>0 and cos<0

b. cos>0 and tan>0

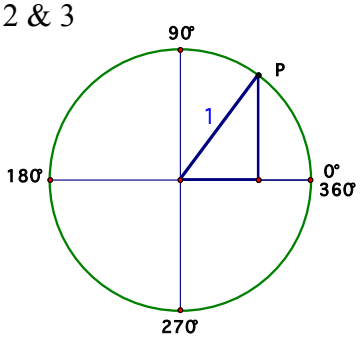
c. sin<0 and tan>0

d. tan<0 and cos >0

1) Fill in the table with the sign of each function

Quadrant	$\sin\theta$	$\cos\theta$	$\tan\theta$
I			
II			
III			
IV			

Use sketch for #'s 2 & 3



2) If the coordinate of point P are $(0.5, 0.5\sqrt{3})$, find: a) $\sin\theta$ b) $\cos\theta$ c) $\tan\theta$

3) If the coordinate of point P are $(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2})$, find:
a) $\sin\theta$ b) $\cos\theta$ c) $\tan\theta$

4) If $m\angle A = 250°$:
a) In which quadrant does the terminal side of $\angle A$ terminate?

b) Is Sin A positive or negative? Why?

For #'s 5-9, identify the quadrant that the angle lies(terminate):

5) $\sin\theta > 0$ and $\cos\theta < 0$

6) $\tan\theta$ is positive and $\cos\theta$ is negative

7) $\sin B = -\frac{3}{5}$ and $\cos B > 0$

8) tan A>0 and (tan A)(sin A)>0

9) $\tan x = -1$ and $\cos x = -\frac{\sqrt{2}}{2}$

10) If $\sin\theta = -\frac{1}{2}$ and $\cos\theta = -\frac{\sqrt{3}}{2}$, which of the following could be the value of θ?
(a) 30 (b) 150 (c) 210 (d) 330