

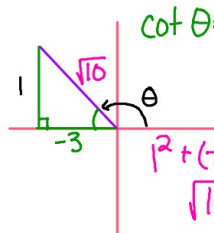
September 26

SWBAT:

Find the values of all trig functions given any angle

Calculate and sketch the reference angle

If $\cot \theta = -3$ and the angle is in Quadrant 2, find the values of the remaining five trig functions.



$\cot \theta = -3 = \frac{\text{adj}}{\text{opp}}$

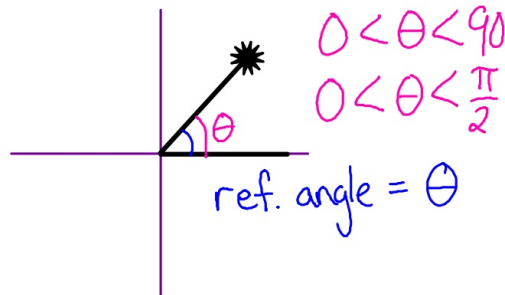
$1^2 + (-3)^2 = h^2$
 $\sqrt{10} = h$

$\cot \theta = -3$ $\sin \theta = \frac{1}{\sqrt{10}}$ $\csc \theta = \sqrt{10}$
 $\tan \theta = -\frac{1}{3}$ $\cos \theta = \frac{-3}{\sqrt{10}}$ $\sec \theta = \frac{\sqrt{10}}{-3}$

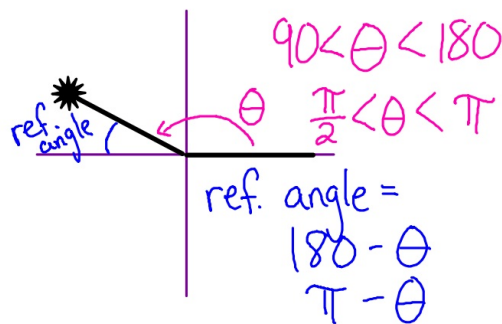
reference
angle

the acute angle
formed by the
terminal side + the x-axis

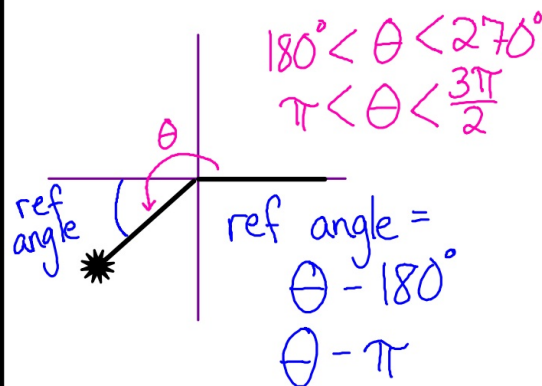
First
Quadrant



Second
Quadrant



Third
Quadrant



Forth
Quadrant

