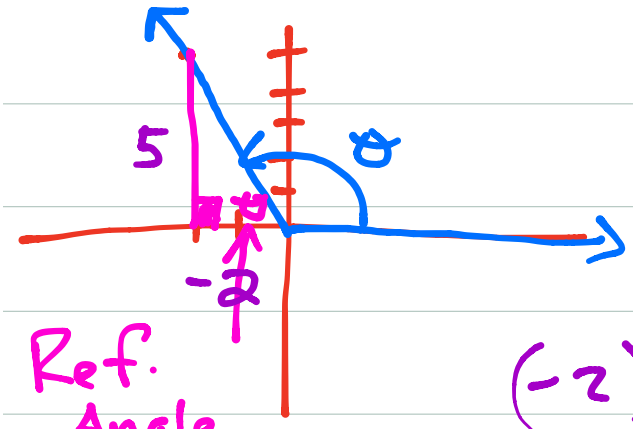
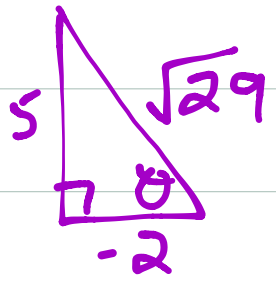
7.4 NOTES -- DAY 2

Find the exact value of the 6 trig. functions of a positive angle θ if $(-2,5)$ is a point on the terminal side of the angle.



Ref. Angle



$(-2)^2 + (5)^2 = x^2$

$4 + 25$

$29 = x^2$

$\sqrt{29} = x$

$\sin\theta = \frac{5}{\sqrt{29}} = \frac{5\sqrt{29}}{29}$

$\cos\theta = \frac{-2}{\sqrt{29}} = \frac{-2\sqrt{29}}{29}$

$\tan\theta = \frac{-5}{2}$

$\csc\theta = \frac{\sqrt{29}}{5}$

$\sec\theta = -\frac{\sqrt{29}}{2}$

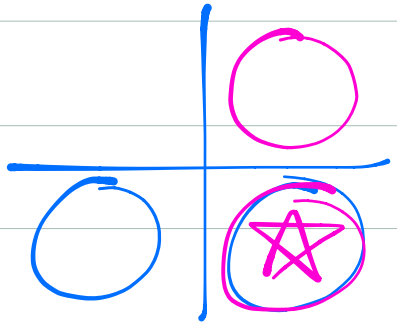
$\cot\theta = -\frac{2}{5}$

Name the Quadrant.

$0 \le x < 2\pi$

(1) $\sin\theta < 0$, $\cos\theta > 0$

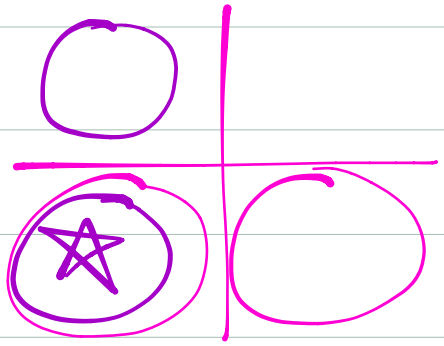
sin negative cos pos.

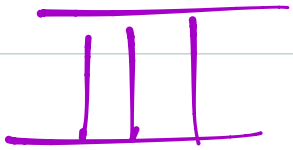


IV

② $\sin\theta < 0$, $\cos\theta < 0$

neg. neg.





③ $\sec\theta < 0$, $\tan\theta > 0$

cos neg. tan pos.