13.3 Day 2: Finding trig values when given a specific point on the <u>terminal</u> side of an angle, use the <u>reference angle</u> & draw a right thangle. EX: Find the Six trig functions of θ if (4,3) is a point on the terminal side of the angle. y $Sin\theta = \frac{3}{5}$ $CSC\theta = \frac{5}{3}$ (4,3) $COSO = \frac{4}{5}$ $Sec\theta = \frac{5}{4}$ $\tan\theta = \frac{3}{4}$ $\cot\theta = \frac{4}{3}$ Use the following points to find the G trig functions of θ if those points are on the terminal side of the angle. (1) (8, -15) $(3) (-7, 2)_{(-7)^2+2^2=C^2}$ (2) (.4, - 3) $Sin\theta = \frac{1}{17}$ (-7,2) 153 = C J53 $COS\theta = \overline{17}$ -4 – tano = -<u>15</u> 8 SIND = 2 . 153 $Gin\theta = -\frac{3}{5} GC\theta = -\frac{5}{3}$ -15 SIND = 2153 $\cos\theta = -\frac{4}{5}$ $\sec\theta = -\frac{5}{4}$ (8,-15) Seco= 17/8 (-4,-3) $(0t\theta = 8$ 7 62

(8,-15) Sect = $\frac{17}{8}$ (-4,-3) $COS\theta = \frac{1}{5}$ Sect = $-\frac{3}{4}$ 53 Coto=_<u>8</u> 15 $tano = \frac{3}{4}$ $coto = \frac{4}{3}$ COSΘ = -7.53 53 55 $\cos\theta = -\frac{7\sqrt{53}}{53}$ $tan \theta = \frac{2}{-7}$ Let's place a circle with a radius of 1 on the coordinate plane. $\chi^2 + \left(\frac{1}{2}\right)^2 = |^2$ $\begin{array}{c}
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