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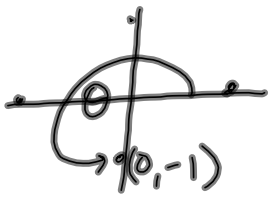
#5 a) $(0,-1)$

$= \frac{3\pi}{2}$



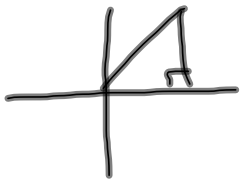
$270°$

$\frac{270\pi}{180}$

e) $\left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$

$\cos\theta = \frac{1}{2}$

$\cos^{-1}\left(\frac{1}{2}\right) = 60°$



3a) $\left(\frac{1}{4}\right)^2 + y^2 = 1$

$\frac{1}{16} + y^2 = 1$

$y^2 = 1 - \frac{1}{16}$

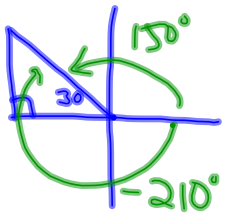
$\frac{16}{16} - \frac{1}{16} = \frac{15}{16}$

$y^2 = \frac{15}{16}$

$y = \pm\sqrt{\frac{15}{16}} = \frac{\sqrt{15}}{4}$

6. $P(\theta) = \left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

$\cos^{-1}\left(\frac{\sqrt{3}}{2}\right) = 30$



$\theta = 150°$

or $\theta = -210°$

Section 4.3 : Trig Ratios

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$\cos\theta = x$

$\sin\theta = y$

$\tan\theta = \frac{y}{x}$

$\left(\frac{opp}{adj} = \frac{sin}{cos}\right)$

Reciprocal Trig. Ratios

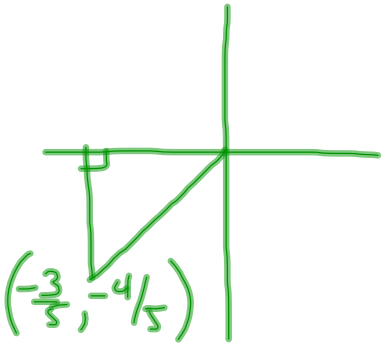
$\text{Secant}\ \theta = \frac{1}{\cos\theta}$

$\text{Cosecant}\ \theta = \frac{1}{\sin\theta}$

$\text{Cotangent}\ \theta = \frac{1}{\tan\theta}$

ex. 1 pt $A\left(-\frac{3}{5}, -\frac{4}{5}\right)$

Label all trig ratios.



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

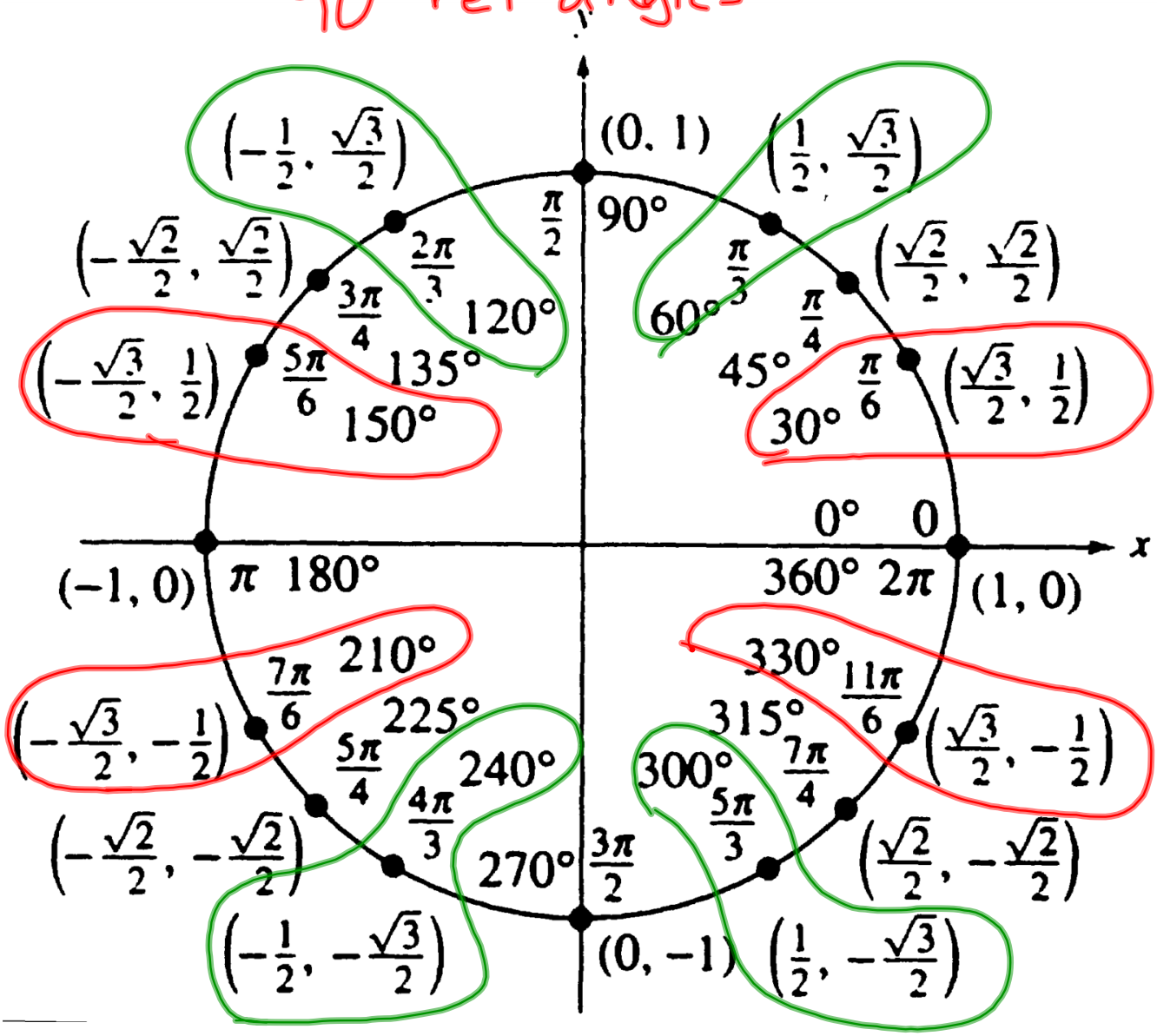
$\cos\theta = -\frac{3}{5}$ $\sec\theta = -\frac{5}{3}$

$\tan\theta = \frac{-\frac{4}{5}}{-\frac{3}{5}}$

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

$= \frac{4}{3}$

90° ref angles



ex.2 pg. 194

Sec 315°

$\cos 315° = \frac{\sqrt{2}}{2}$

$\sec 315° = \frac{2}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$

$= \frac{2\sqrt{2}}{2} = \sqrt{2}$