

$$\sin \theta = \frac{y}{r}$$

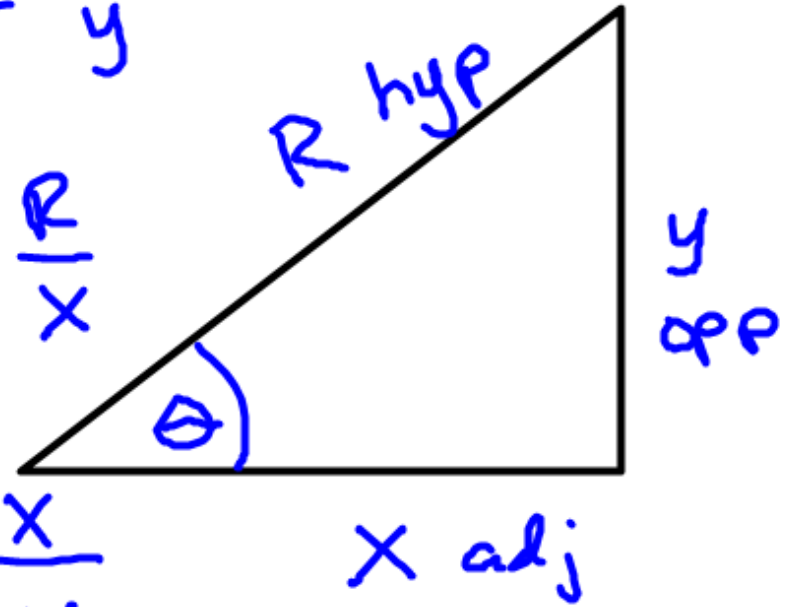
$$\csc \theta = \frac{r}{y}$$

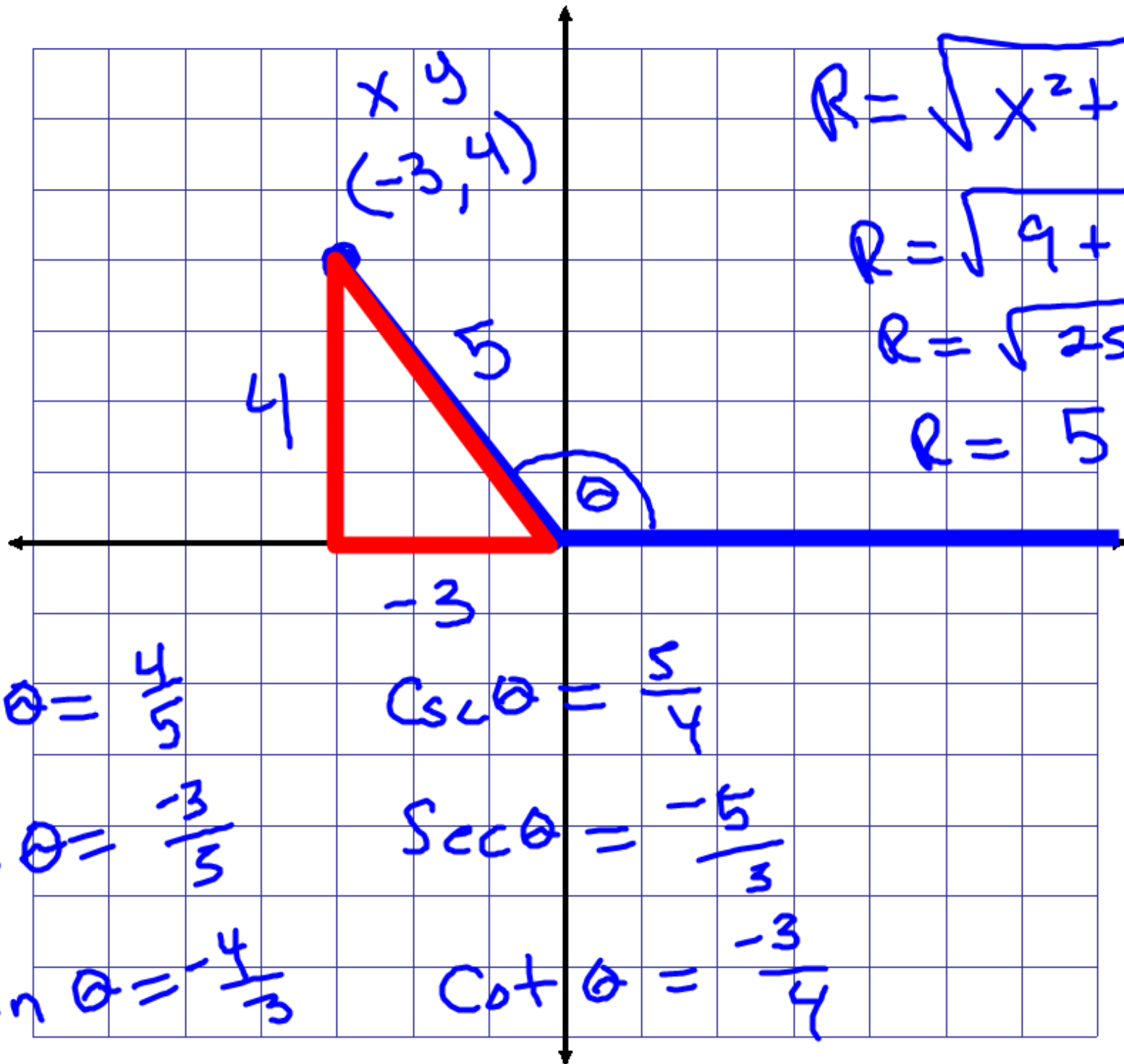
$$\cos \theta = \frac{x}{r}$$

$$\sec \theta = \frac{r}{x}$$

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

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





$$R = \sqrt{x^2 + y^2}$$

$$R = \sqrt{9 + 16}$$

$$R = \sqrt{25}$$

$$R = 5$$

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

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

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

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

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

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

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

$$(4, -5)$$

$$\sin \theta = \frac{-5}{\sqrt{41}} = \frac{-5\sqrt{41}}{41}$$

$$\cos \theta > 0$$

$$R = 6.4 \\ = \sqrt{41}$$

$$\sec \theta = \frac{\sqrt{41}}{4}$$

Find $\sin \theta$ and $\cos \theta$ $R = \sqrt{x^2 + y^2}$

for $\theta = 0, \frac{\pi}{2}, \frac{3\pi}{2}$

$$\theta = 0$$

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

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

$$\sin \theta = 0$$

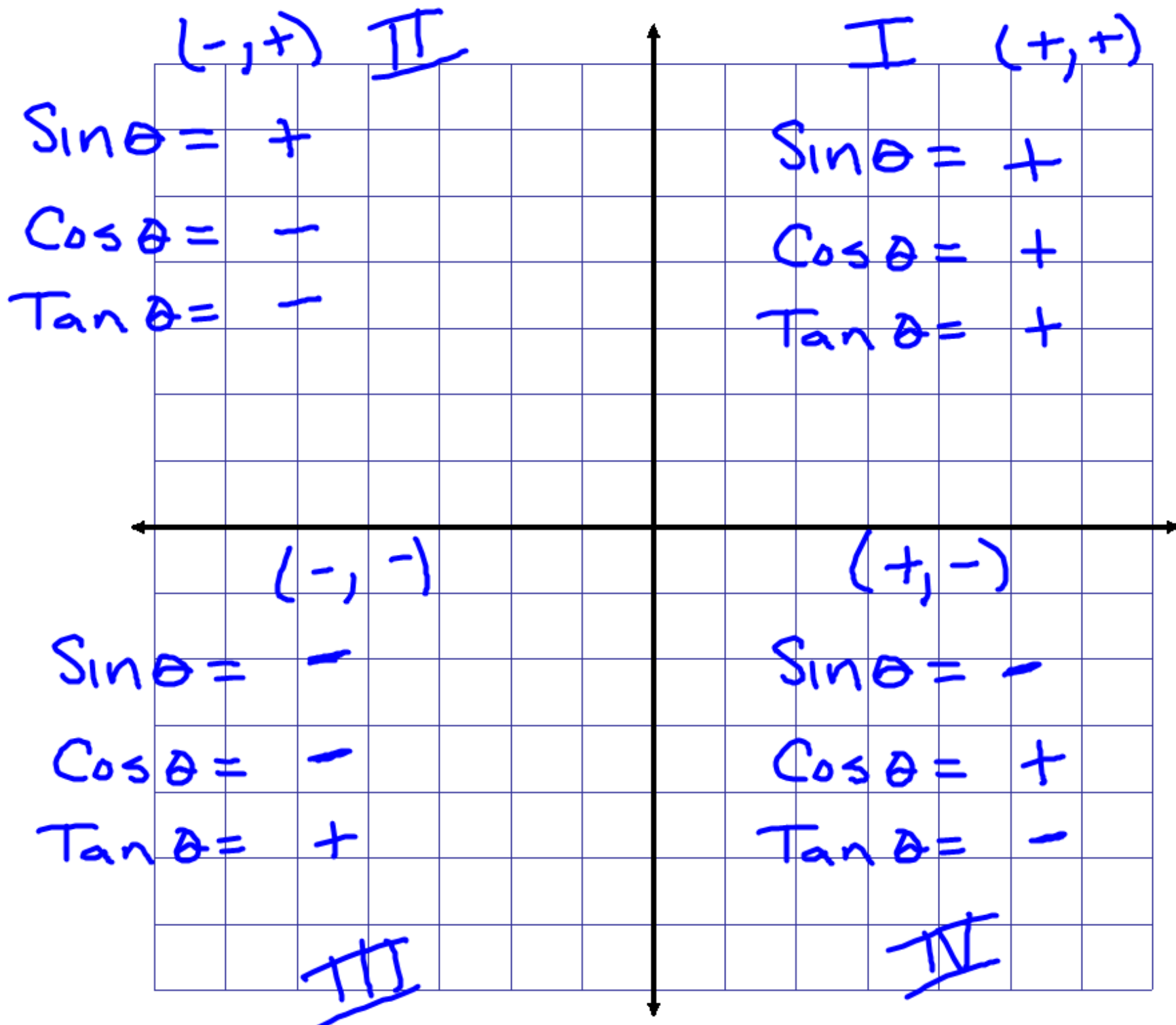
$$\sin \theta = 1$$

$$\sin \theta = -1$$

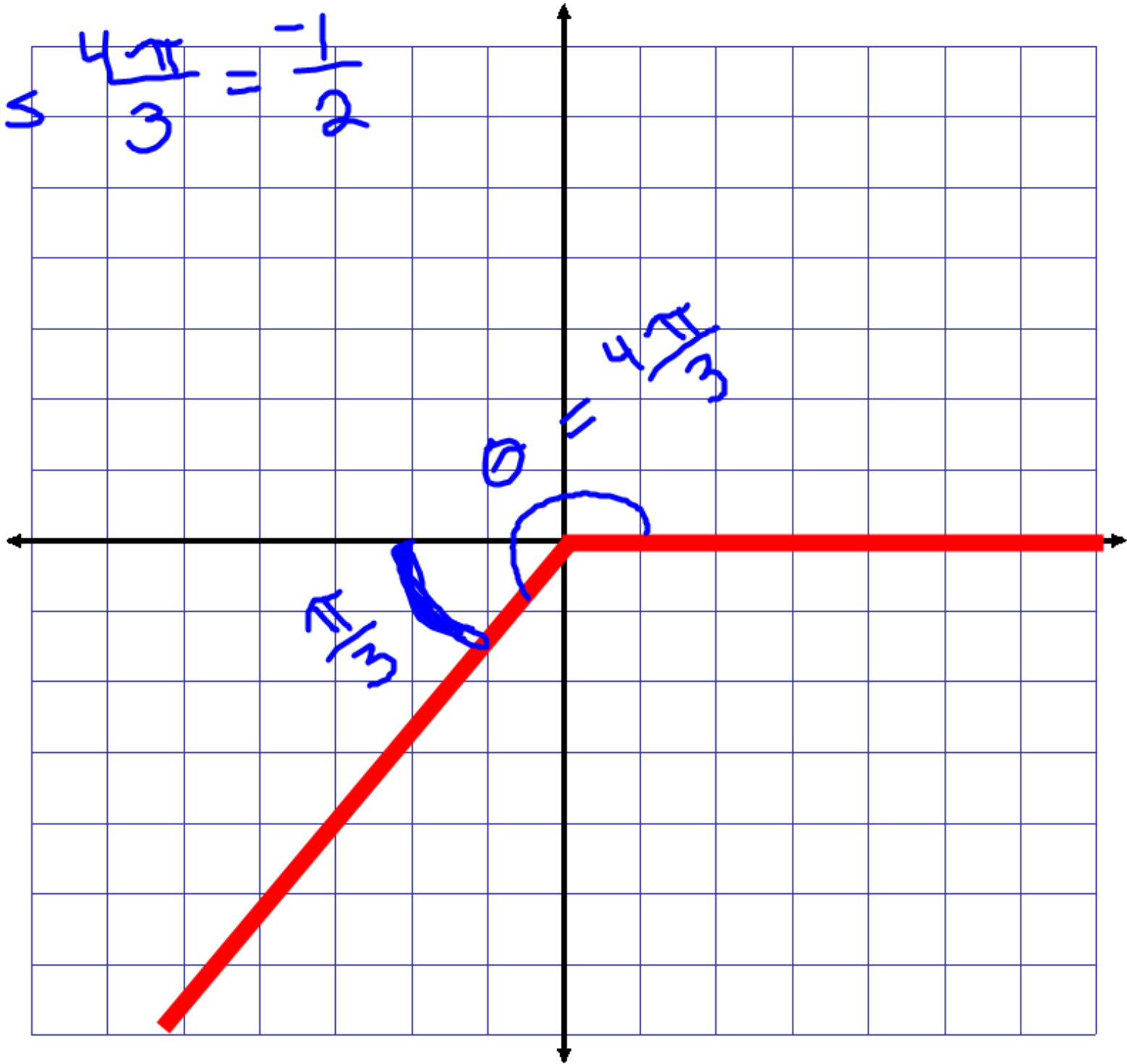
$$\cos \theta = 1$$

$$\cos \theta = 0$$

$$\cos \theta = 0$$



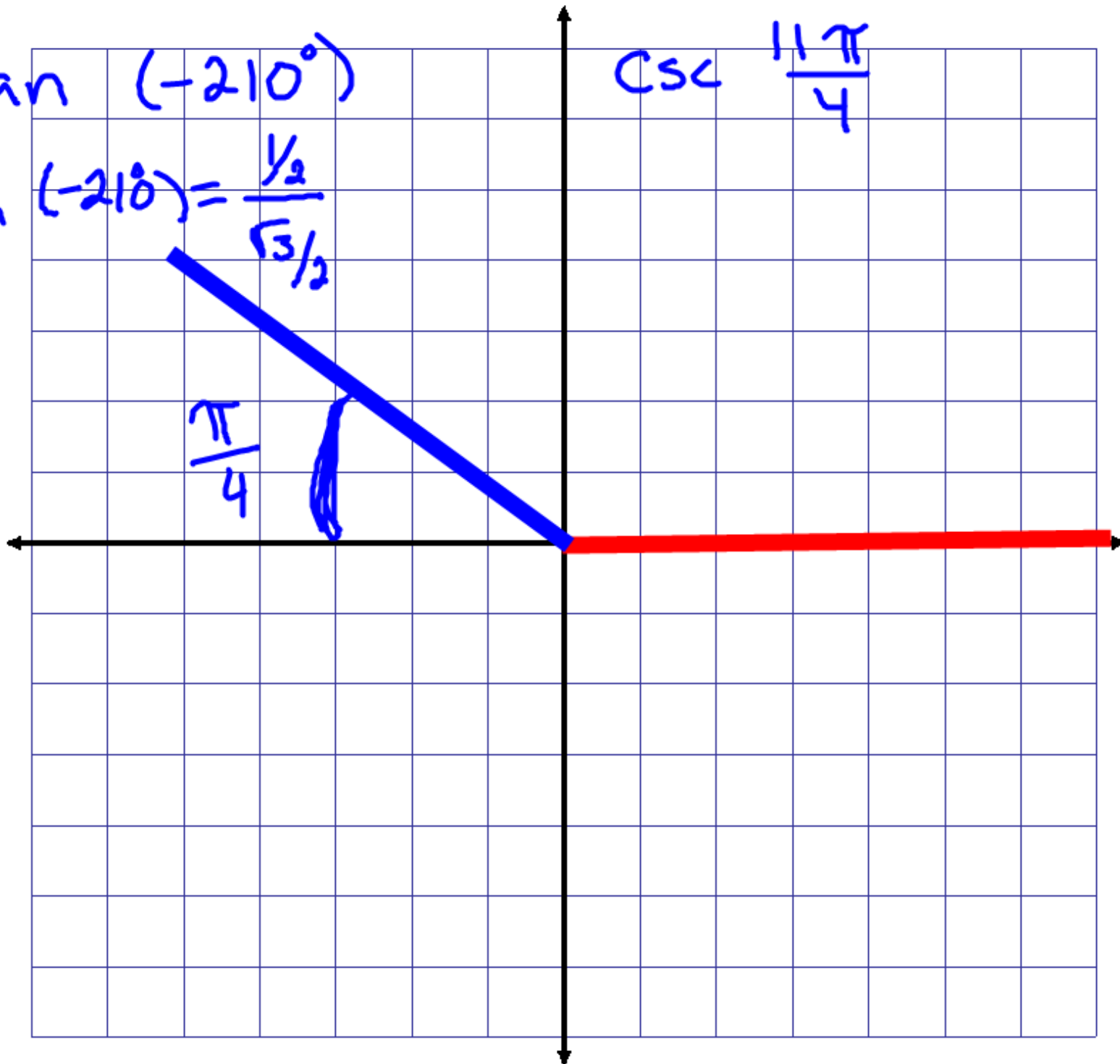
$$\cos \frac{4\pi}{3} = -\frac{1}{2}$$



Tan (-210°)

$$\text{Tan } (-210^\circ) = \frac{1/2}{\sqrt{3}/2}$$

Csc $\frac{11\pi}{4}$



$$\tan(-210^\circ) = \frac{1/2}{\sqrt{3}/2} = \frac{1}{2} \cdot \frac{2}{\sqrt{3}} = \frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$$

$$\csc \frac{11\pi}{4} = \frac{1}{\sin \frac{\pi}{4}} = \frac{1}{\frac{\sqrt{2}}{2}} = \frac{2}{\sqrt{2}} = \sqrt{2}$$

HW pg 284 - 286

#1 - 101

every 10th one

So 1, 11, 21,