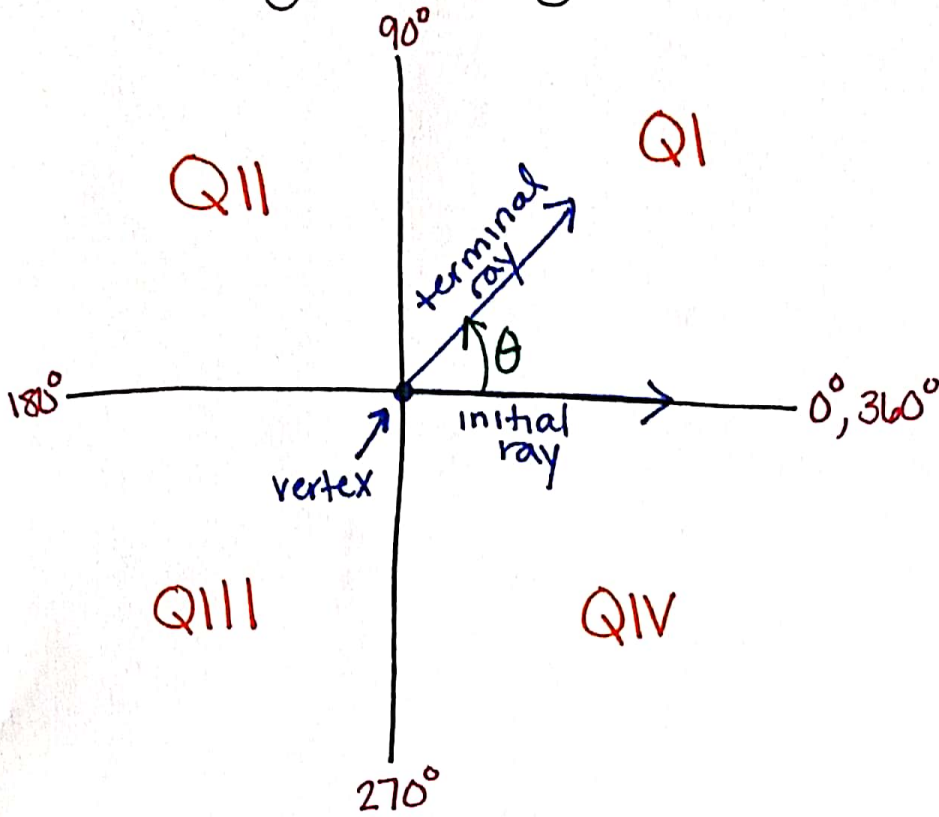
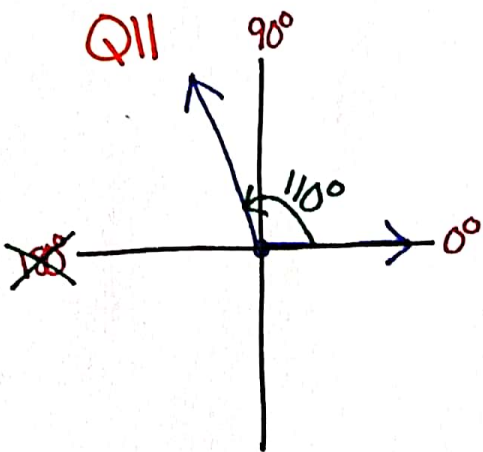


April 23

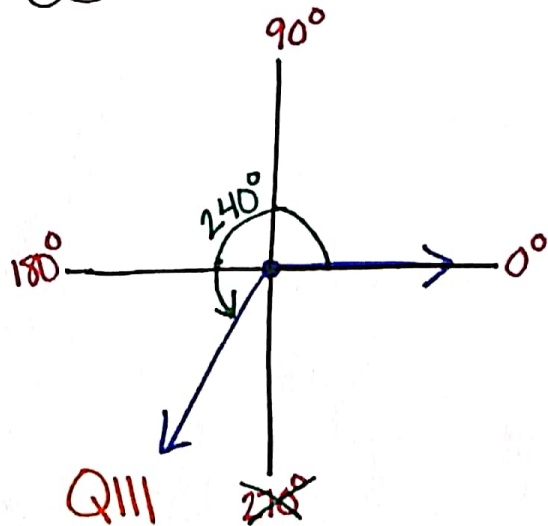
# Angles in Degrees



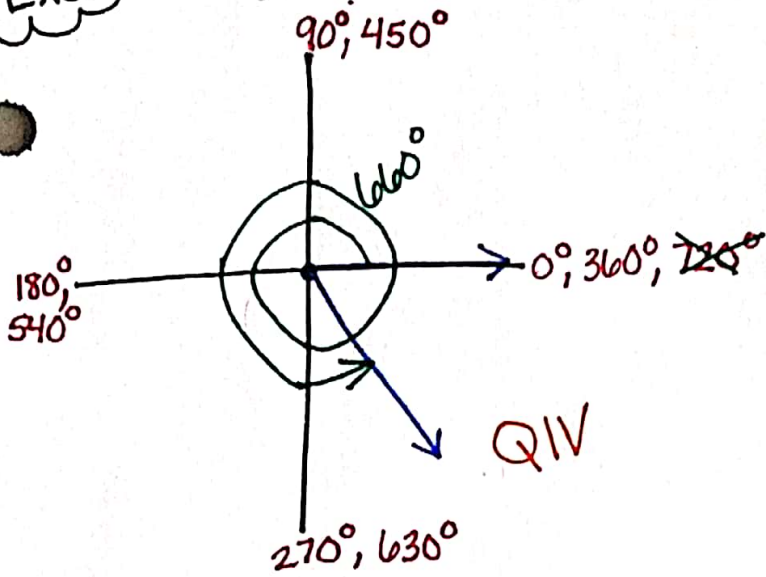
(Ex1) Sketch  $110^\circ$



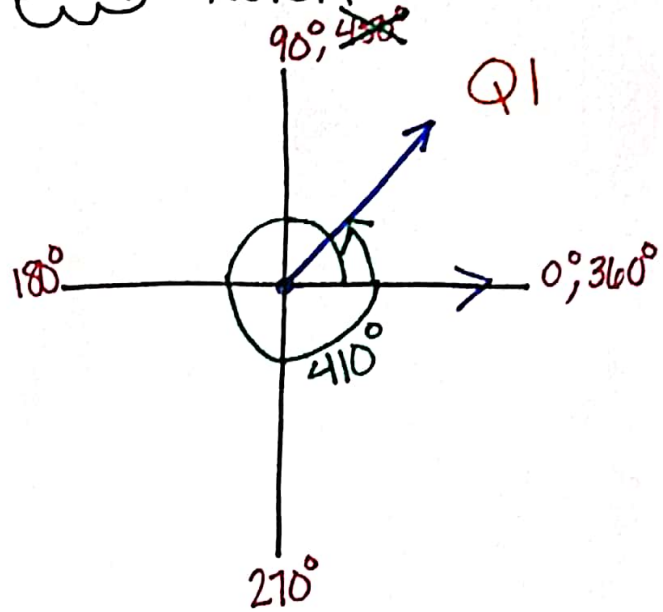
(Ex2) Sketch  $240^\circ$



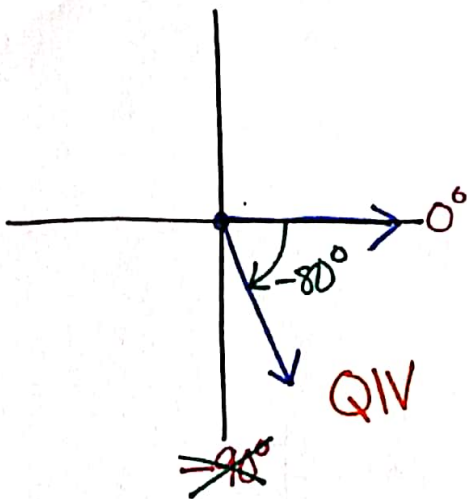
Ex3 Sketch  $660^\circ$ .



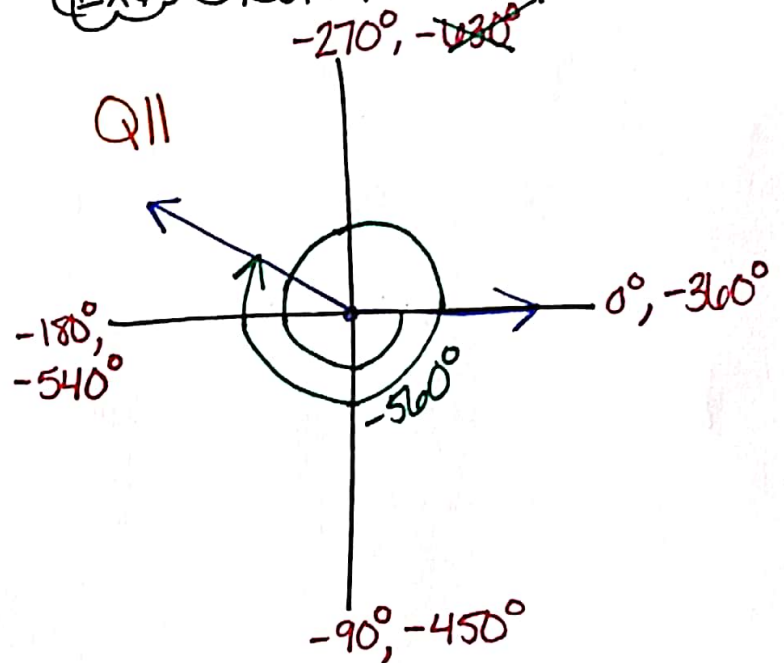
Ex4 Sketch  $410^\circ$ .



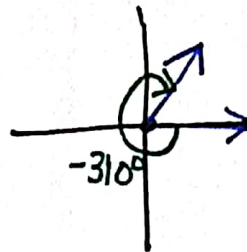
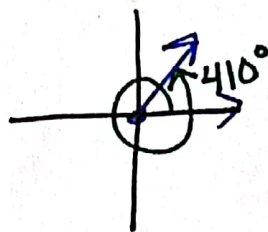
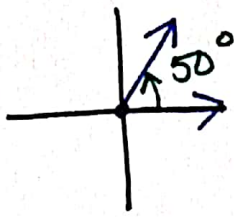
Ex5 Sketch  $-80^\circ$ .



Ex6 Sketch  $-560^\circ$ .



## Coterminal Angles



Coterminal angles – angles whose terminal rays are in the same position but have different spirals

To find coterminal angles, add/subtract  $360^\circ$ .

**Ex 7** Find coterminal angles for  $625^\circ$ .

$$625 + 360 = \overset{\text{pos.}}{\boxed{985^\circ}} + 360 = \overset{\text{pos.}}{\boxed{1345^\circ}} + 360 = \overset{\text{pos.}}{\boxed{1705^\circ}}$$

$$625 - 360 = \overset{\text{pos.}}{\boxed{265^\circ}} - 360 = \overset{\text{neg.}}{\boxed{-95^\circ}} - 360 = \overset{\text{neg.}}{\boxed{-455^\circ}}$$

Determine the angle between  $0^\circ$  and  $360^\circ$  that is coterminal to:

**Ex 8**  $1000^\circ - 360 = 640 - 360 = \boxed{280^\circ}$

**Ex 9**  $-1740^\circ + 360 = -1380 + 360 = -1020 + 360 = -660$

$\rightarrow -660 + 360 = -300 + 360 = \boxed{60^\circ}$

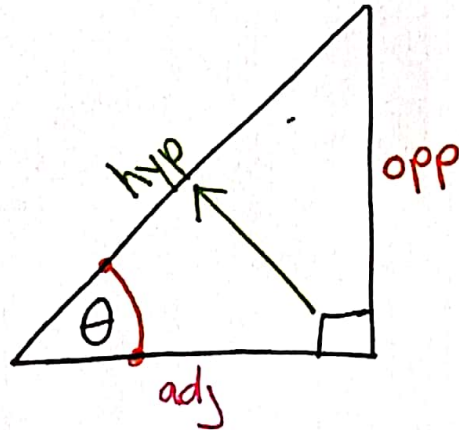
# Right Triangle Trig

$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

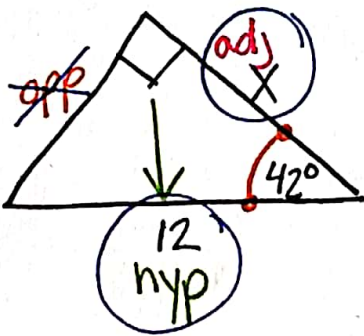
$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

"soh cah toa"



Ex 10 Solve for x.

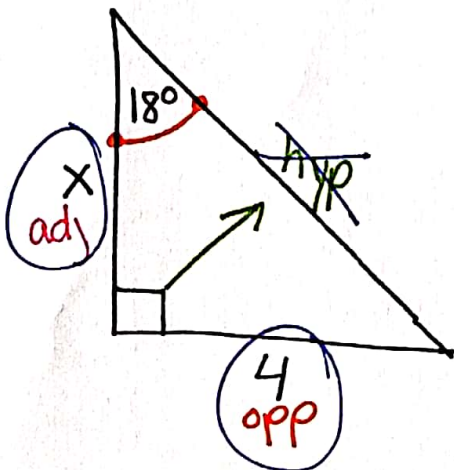


$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$12 \cdot \cos 42^\circ = \frac{x}{12} \cdot 12$$

$$\boxed{8.92 = x}$$

Ex 11 Solve for x.



$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$x \cdot \tan 18^\circ = \frac{4}{x} \cdot x$$

$$\frac{x \cdot \tan 18^\circ}{\tan 18^\circ} = \frac{4}{\tan 18^\circ}$$

$$\boxed{x = 12.31}$$