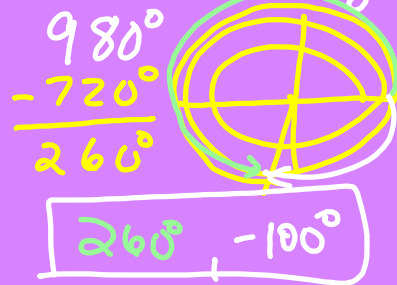


INTRO TO TRIG REVIEW

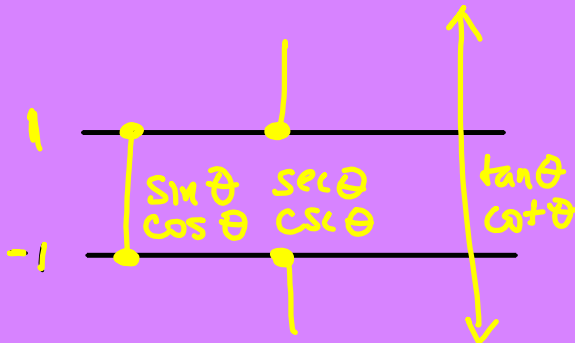
1) Coterminal angles.



2/3) $\pi \text{ rad} = 180^\circ$

$320^\circ \cdot \frac{\pi}{180} = \frac{32}{18} \pi = \frac{16}{9} \pi$

$\frac{23\pi}{10} \cdot \frac{180}{\pi} = 414^\circ$



$\csc \theta = -\frac{2}{3}$ Imp.

$3 \cos \theta + 5 = 4$
 $-5 -5$

$3 \cos \theta = -1$

$\cos \theta = -\frac{1}{3}$ Possible

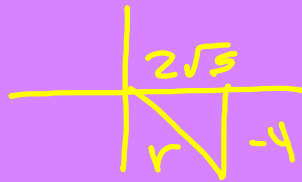
6 a) $\sec \theta > 0$ $\tan \theta < 0$

Check All
 Sign... $\frac{x}{x}$ + $\frac{-}{-}$ IV

7-10) Draw picture of Δ !

$(2\sqrt{5}, -4)$

Find $\sec \theta$.



$$(2\sqrt{5})^2 + (-4)^2 = r^2$$

$$\sec \theta = \frac{r}{x} = \frac{r}{2\sqrt{5}} = \frac{3\sqrt{5}}{5}$$

$$20 + 16 = r^2$$

$$\sqrt{36} = \sqrt{r^2}$$

$$\pm 6 = r$$

8-10

Given $\cos \theta = -\frac{7}{8}$ and $\tan \theta > 0$
find $\csc \theta$

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

$$= \frac{8\sqrt{15}}{-\sqrt{15} \cdot \sqrt{15}}$$

$$= \frac{8\sqrt{15}}{-15}$$

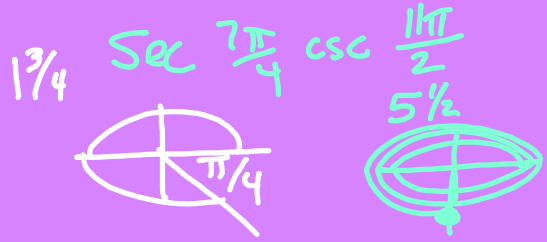


$$y^2 + 49 = 64$$

$$\sqrt{y^2} = \sqrt{15}$$

$$y = \pm\sqrt{15}$$

~~210~~ ~~30~~
 $\sin 210^\circ + \cot^2 120^\circ$



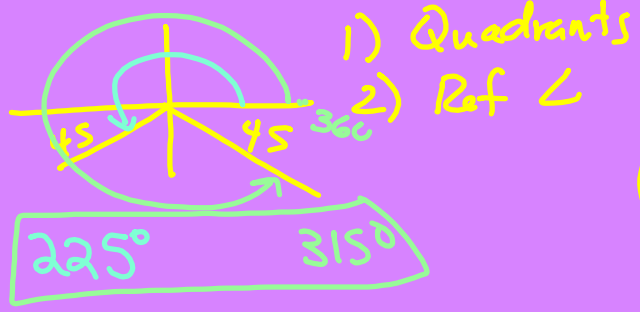
$$\frac{-\frac{1}{2} + \left(-\frac{1}{\sqrt{3}}\right)^2}{(\sqrt{2})(-1)}$$

$$\frac{-\frac{1}{2} + \frac{1}{3}}{-\sqrt{2}} = \frac{-\frac{3}{6} + \frac{2}{6}}{-\sqrt{2}} = \frac{-\frac{1}{6}}{-\sqrt{2}} = \frac{\frac{1}{6}}{\frac{\sqrt{2}}{1}} = \frac{1}{6} \cdot \frac{1}{\sqrt{2}} = \frac{1}{6\sqrt{2} \cdot \sqrt{2}} = \frac{\sqrt{2}}{12}$$

$\cot \theta = \sqrt{3}$ to

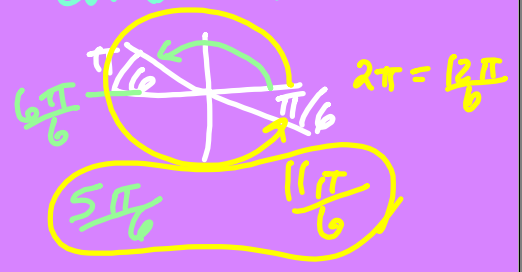
13 Find angle(s)
 $0 \leq \theta < 360^\circ$

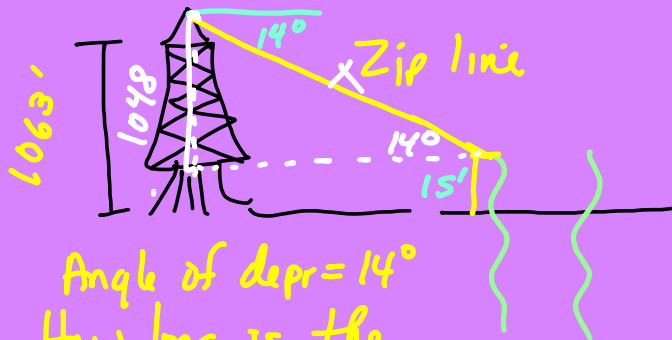
$$\sin \theta = -\frac{\sqrt{2}}{2}$$



$$0 \leq \theta < 2\pi$$

$$\cot \theta = -\sqrt{3}$$





Angle of depr = 14°
 How long is the
 Zip line?

$$x \cdot \sin 14^\circ = \frac{1048}{x}$$

$$x = \frac{1048}{\sin 14^\circ}$$

$$x = 4332 \approx 4300 \text{ ft}$$

How long is the zip line?

$$\sin A = \frac{250}{376}$$

$$\sin^{-1}(25)$$