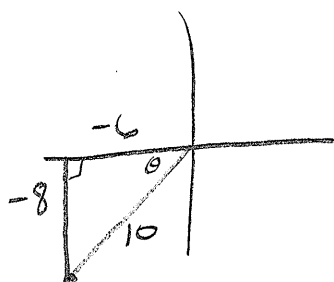


FST Trig 2.3 Warm up

1) Find the exact value of each of the six trigonometric functions for the angle θ with the terminal side containing P (-6, -8).



$$\sqrt{(-8)^2 + (-6)^2}$$

$$= 10$$

$$\sin \theta = \frac{-8}{10} = -\frac{4}{5} \quad \csc \theta = \frac{10}{-8} = -\frac{5}{4}$$

$$\cos \theta = \frac{-6}{10} = -\frac{3}{5} \quad \sec \theta = \frac{10}{-6} = -\frac{5}{3}$$

$$\tan \theta = \frac{-8}{-6} = \frac{4}{3} \quad \cot \theta = \frac{-6}{-8} = \frac{3}{4}$$

2) Tell me what calculator MODE you would use to evaluate these problems. Explain why you choose that mode. Then evaluate.

$$\text{a) } \cot 192^\circ 47' 22'' = \frac{1}{\tan 192^\circ 47' 22''} = 4.405$$

Degree \rightarrow angle
given in DMS

$$\text{b) } \csc(-2.33) = \frac{1}{\sin(-2.33)} = -1.379$$

Radian \rightarrow angle
given in rad