

Find the five remaining trig functions

$$1. \sec \theta = \frac{5}{2}$$

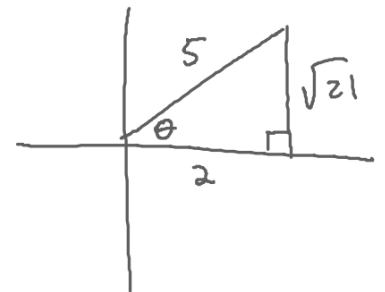
$$\cos \theta = \frac{2}{5}$$

$$\sin \theta = \frac{\sqrt{21}}{5}$$

$$\csc \theta = \frac{5}{\sqrt{21}}$$

$$\tan \theta = \frac{\sqrt{21}}{2}$$

$$\cot \theta = \frac{2}{\sqrt{21}}$$

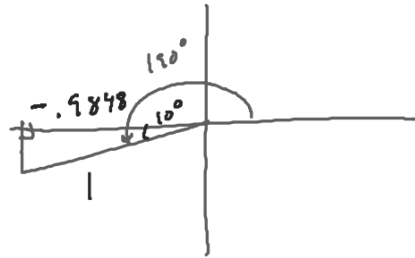


Find the five remaining trig functions

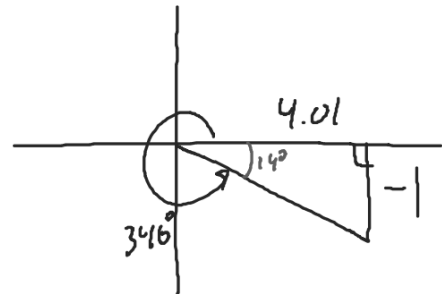
1. $\sin\theta = \frac{4}{\sqrt{21}}$

Find the value using your calculator and then draw the triangle represented by the trig function.

$$5. \cos(190^\circ) = -.9848$$

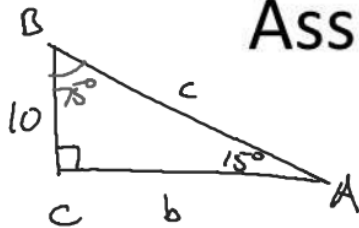


$$6. \cot(346^\circ) = -4.01$$



Solve the right Triangle ABC for all of its unknown parts.

Assume C is the right angle



$m\angle B = 75^\circ$ 1. $\alpha = 15^\circ$ $a = 10$

$b = \tan 15^\circ = \frac{10}{b}$ $b = \frac{10}{\tan 15^\circ} = 37.32$

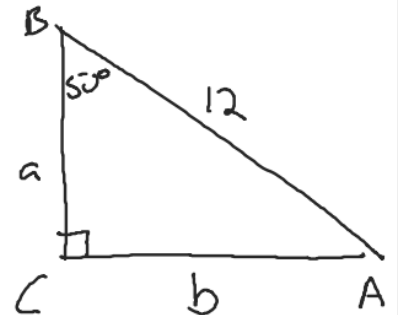
$c = \sin 15 = \frac{10}{c}$ $c = \frac{10}{\sin 15^\circ} = 38.637$

2. $\beta = 50^\circ$ $c = 12$

$m\angle A = 40^\circ$

$a =$
 $\cos 50^\circ = \frac{a}{12}$
 $a = 12 \cos 50^\circ$
 $= 7.71$

$b =$
 $\sin 50^\circ = \frac{b}{12}$
 $b = 12 \sin 50^\circ$
 $= 9.192$



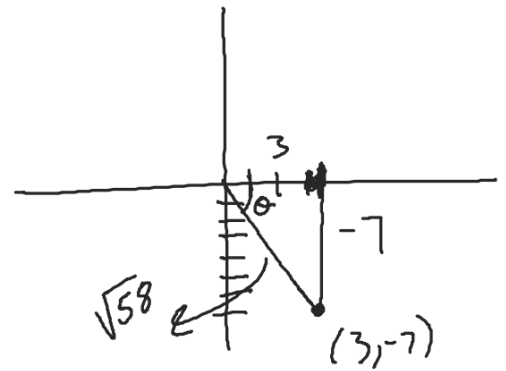
Find the six trig functions given a point

2. $P(3, -7)$

$$\sin \theta = \frac{-7}{\sqrt{58}}$$

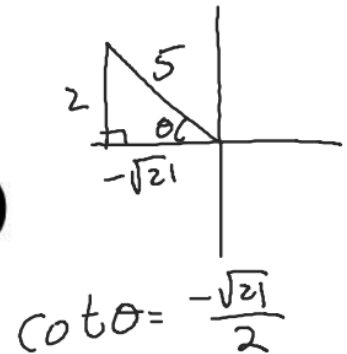
$$\cos \theta = \frac{3}{\sqrt{58}}$$

$$\tan \theta = \frac{-7}{3}$$



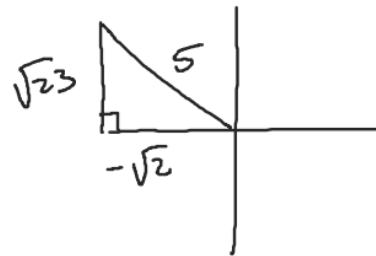
Find the value of $\cot\theta$ for each situation below.

$$3. \sin\theta = \frac{2}{5} \quad \tan\theta < 0$$



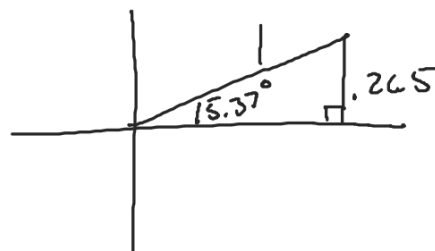
$$4. \cos\theta = \frac{-\sqrt{2}}{5} \quad \frac{\pi}{2} < \theta < \pi$$

$$\cot\theta = \frac{-\sqrt{2}}{\sqrt{23}}$$

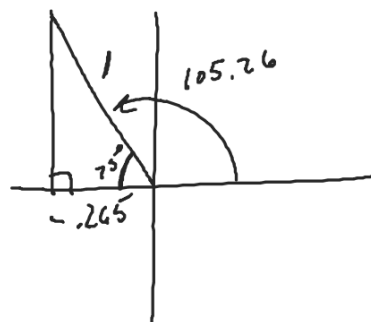


Find the value using your calculator and then draw the triangle represented by the trig function.

5. $\sin^{-1}(.265) = 15.37^\circ$



6. $\cos^{-1}(-.265) = 105.26^\circ$



Solve the equation using your calculator give answers between $0 \leq \theta \leq 360$

$$7 \cdot \cos(\theta) = .636$$