

WARM - UP

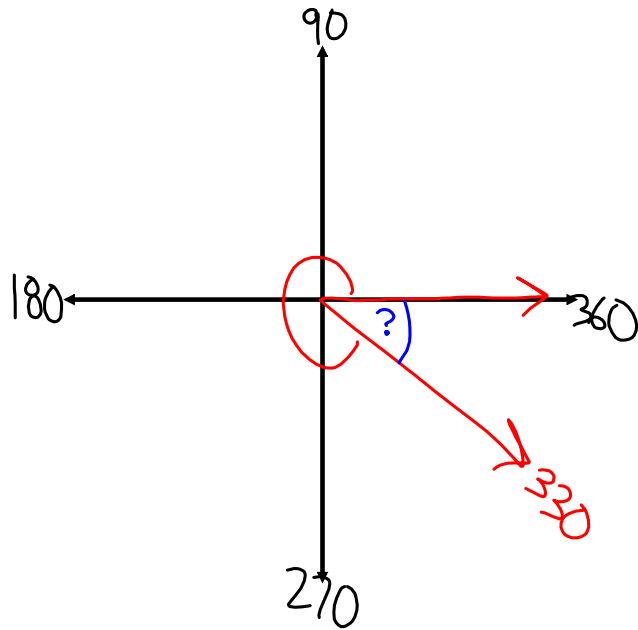
Find the reference angle of an angle with

radian measure of $\frac{11\pi}{6}$.

$$\frac{11\pi}{6} \cdot \frac{180}{\pi} \rightsquigarrow 330^\circ$$

Ref \angle : $30^\circ \cdot \frac{\pi}{180}$

$$\frac{30\pi}{180} \rightsquigarrow \boxed{\frac{\pi}{6}}$$



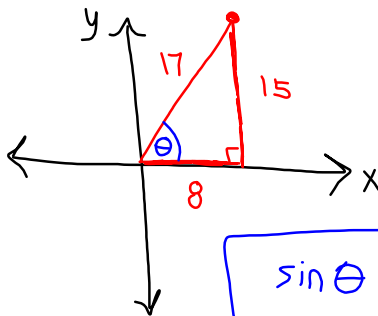
Apr 10-9:33 AM

Unit 6 - Day 5 - All SIX Trig. Functions

$\sin \theta = \frac{\text{opp}}{\text{hyp}}$	$\csc \theta = \frac{\text{hyp}}{\text{opp}}$	$\cos \theta = \frac{\text{adj}}{\text{hyp}}$	$\sec \theta = \frac{\text{hyp}}{\text{adj}}$	$\tan \theta = \frac{\text{opp}}{\text{adj}}$	$\cot \theta = \frac{\text{adj}}{\text{opp}}$
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1. Find all six trigonometric function values if the terminal side contains the given point.

$(8, 15)$



$$a^2 + b^2 = c^2$$

$$8^2 + 15^2 = c^2$$

$$\sqrt{289} = \sqrt{c^2}$$

$$17 = c$$

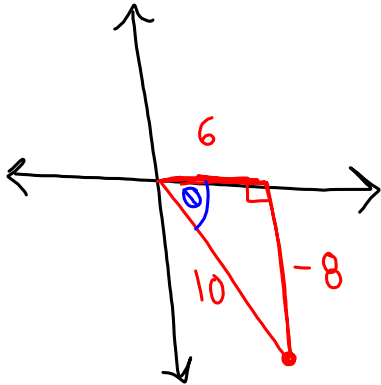
$\sin \theta = \frac{15}{17}$	$\csc \theta = \frac{17}{15}$
$\cos \theta = \frac{8}{17}$	$\sec \theta = \frac{17}{8}$
$\tan \theta = \frac{15}{8}$	$\cot \theta = \frac{8}{15}$

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$\sin \theta = \frac{\text{opp}}{\text{hyp}}$	$\csc \theta = \frac{\text{hyp}}{\text{opp}}$	$\cos \theta = \frac{\text{adj}}{\text{hyp}}$	$\sec \theta = \frac{\text{hyp}}{\text{adj}}$	$\tan \theta = \frac{\text{opp}}{\text{adj}}$	$\cot \theta = \frac{\text{adj}}{\text{opp}}$
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2. Find all six trigonometric function values if the terminal side contains the given point

$(6, -8)$



$$\begin{aligned} \sin \theta &= \frac{-8}{10} \rightsquigarrow -\frac{4}{5} & \csc \theta &= \frac{5}{-4} \\ \cos \theta &= \frac{6}{10} \rightsquigarrow \frac{3}{5} & \sec \theta &= \frac{5}{3} \\ \tan \theta &= \frac{-8}{6} \rightsquigarrow -\frac{4}{3} & \cot \theta &= \frac{3}{-4} \end{aligned}$$

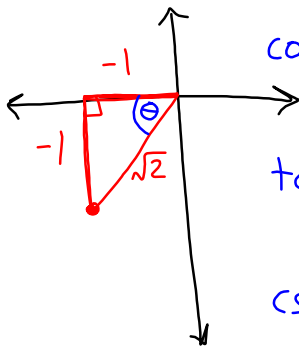
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$\sin \theta = \frac{\text{opp}}{\text{hyp}}$	$\csc \theta = \frac{\text{hyp}}{\text{opp}}$	$\cos \theta = \frac{\text{adj}}{\text{hyp}}$	$\sec \theta = \frac{\text{hyp}}{\text{adj}}$	$\tan \theta = \frac{\text{opp}}{\text{adj}}$	$\cot \theta = \frac{\text{adj}}{\text{opp}}$
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Level 4

3. Find all six trigonometric function values if the terminal side contains the given point

$(-1, -1)$



$$\begin{aligned} \sin \theta &= \frac{-1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} \rightsquigarrow -\frac{\sqrt{2}}{2} \\ \cos \theta &= \frac{-1}{\sqrt{2}} \rightsquigarrow -\frac{\sqrt{2}}{2} \\ \tan \theta &= \frac{-1}{-1} \rightsquigarrow 1 \\ \csc \theta &= \frac{\sqrt{2}}{-1} \rightsquigarrow -\sqrt{2} \\ \sec \theta &= \frac{\sqrt{2}}{-1} \rightsquigarrow -\sqrt{2} \\ \cot \theta &= \frac{-1}{-1} = 1 \end{aligned}$$

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