

Match each rule

For point (x, y) and r:

$r =$	$= \frac{r}{y}$
$\sin \theta =$	$= \frac{r}{x}$
$\cos \theta =$	$= \frac{x}{y}$
$\tan \theta =$	$= \frac{y}{r}$
$\csc \theta =$	$= \frac{x}{r}$
$\sec \theta =$	$= \frac{y}{x}$
$\cot \theta =$	$= \sqrt{x^2 + y^2}$

Activity 3: individually

Check

The terminal side of θ in standard position contains the point (2, -8).
Find the exact values of the six trigonometric functions of θ .

Step 1) find r: $r = \sqrt{x^2 + y^2}$

$$r = \sqrt{(\square)^2 + (\square)^2} =$$

Step 2) find trigonometric functions:

$$\begin{aligned} \sin \theta = \frac{y}{r} = \text{---} \text{ or } \text{---} \quad \cos \theta = \frac{x}{r} = \text{---} \text{ or } \text{---} \quad \tan \theta = \frac{y}{x} = \text{---} \text{ or } \text{---} \\ \csc \theta = \frac{r}{y} = \text{---}, \quad \sec \theta = \frac{r}{x} = \text{---}, \quad \cot \theta = \frac{x}{y} = \text{---} \end{aligned}$$