DO NOW

ALGEBRA 2 · 5 MINUTES · START RIGHT AWAY

Lesson 7-2f **Use the Pythagorean Identity $\sin^2\theta + \cos^2\theta = 1$**

Name _____ Date _____ Per _____

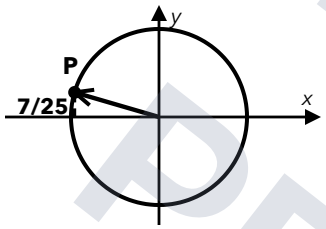
1 FLUENCY

$\cos\theta = -\frac{8}{17}$ and θ is in Quadrant III. Use $\sin^2\theta + \cos^2\theta = 1$ to find $\sin\theta$.

$\sin^2\theta =$ ☐ $\sin\theta =$ ☐

2 VISUAL MODEL

P is on the unit circle in Quadrant II with $y = \frac{7}{25}$. Find $x = \cos\theta$, then $\tan\theta$.



$\cos\theta =$ ☐

$\tan\theta =$ ☐

3 APPLICATION

A 1-m robot arm's tip is $\frac{2}{3}$ m above the pivot and to its left. Find $\cos\theta$ for the arm, exactly and to the nearest hundredth.

$\cos\theta =$ ☐ $\approx$ ☐

WORK

4 REASONING

Lena says if $\sin\theta = 0.9$, then $\cos\theta = 0.1$ because sine and cosine add to 1. Is she correct? Explain.

Yes or **No**

_____

_____

*We don't divide our effort, we **multiply** it!*

✎ Show your work ✓ Check your work ★ Try your best

Preview - the full worksheet and its answer key are at primeworksheet.com