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ALGEBRA 2 · 5 MINUTES · START RIGHT AWAY

Lesson 7-1d

Use Radians to Find Arc Length

Name _____ Date _____ Per _____

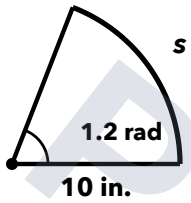
1 FLUENCY

Find the arc length s on a circle with radius 6 cm and central angle $\frac{2\pi}{3}$.

$s = r\theta =$ ☐ cm $\approx$ ☐ cm

2 VISUAL MODEL

Find the length of the arc s in the sector. Then find the angle in degrees.



$s =$ ☐ in.

angle $\approx$ ☐

3 APPLICATION

A clock pendulum is 80 cm long and swings through an angle of 30°. How far does its tip travel in one swing? Round to the nearest tenth.

exact: ☐ cm $\approx$ ☐ cm

WORK

4 REASONING

Leo finds the arc length for r = 5 and a 60° angle as s = 5 · 60 = 300. Is he correct? Find the error and the correct arc length.

Yes or **No** $s =$ ☐

_____

*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