DO NOW

ALGEBRA 2 · 5 MINUTES · START RIGHT AWAY

Lesson 6-2a **Rewrite an Exponential Function to Identify a Rate**

Name _____ Date _____ Per _____

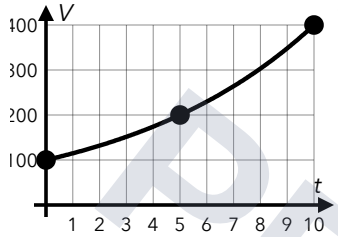
1 FLUENCY

Rewrite $f(t) = 40(2)^{t/3}$ in the form $a \cdot b^t$. Round b to 4 places.

$f(t) = 40($ ☐ $)^t$ rate $\approx$ ☐ per unit

2 VISUAL MODEL

An investment doubles every 5 years: $V(t) = 100(2)^{t/5}$. Find the annual growth factor and rate.



$b = 2^{1/5} \approx$ ☐

annual rate $\approx$ ☐

3 APPLICATION

A fund grows 9% per year: $A(t) = 3000(1.09)^t$. Rewrite it with t in months. What is the monthly growth rate?

$A = 3000($ ☐ $)^{12t} \approx$ ☐ per month

WORK

4 REASONING

Jo says a 12% annual growth rate is the same as a 1% monthly growth rate. 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