DO NOW

ALGEBRA 2 · 5 MINUTES · START RIGHT AWAY

Lesson 3-5a # Use Zeros to Graph a Polynomial Function

Name _____ Date _____ Per _____

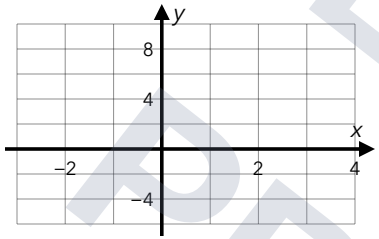
1 FLUENCY

List the zeros of $f(x) = (x + 3)(x - 1)(x - 4)$.

$x =$ ☐, ☐, ☐

2 VISUAL MODEL

Sketch $f(x) = (x + 2)(x - 1)(x - 3)$. Plot the zeros and the y-intercept first.



Zeros: ☐

y-int: ☐

rises or **falls** on right

3 APPLICATION

Squares of side x in. are cut from the corners of a 10 in. by 8 in. sheet to make an open box: $V(x) = x(10 - 2x)(8 - 2x)$. Find the zeros. Which x-values make sense?

Zeros: _____ Domain: _____

WORK

4 REASONING

Ty says the graph of $f(x) = -x(x - 3)(x + 1)$ rises to the right because all three zeros are easy to plot. Is he 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