DO NOW

ALGEBRA 2 · 5 MINUTES · START RIGHT AWAY

Lesson 2-2a **Find the Vertex from a Quadratic Function in Standard Form**

Name _____ Date _____ Per _____

1 FLUENCY

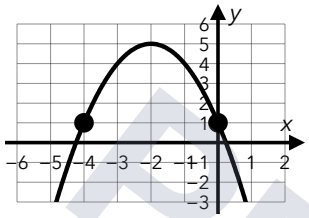
Find the vertex of $f(x) = 2x^2 - 12x + 7$.

$x = -\frac{b}{2a} =$ ☐ $f(3) =$ ☐

Vertex: _____

2 VISUAL MODEL

The graph is $y = -x^2 - 4x + 1$. Use the formula, then check on the graph.



$a =$ ☐ $b =$ ☐

$x = -\frac{b}{2a} =$ ☐

Vertex: _____

3 APPLICATION

A shop's weekly revenue is $R(p) = -5p^2 + 200p$ dollars when the price is p dollars. What price gives the most revenue? What is that revenue?

Price: $☐ Revenue: $☐

WORK

4 REASONING

Ty says the vertex of $y = x^2 + 6x + 2$ has $x = 3$ because $-\frac{b}{2a} = 6 \div 2$. Find his error and the correct vertex.

Vertex: _____

_____

*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