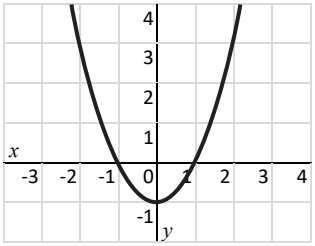
LESSON 72 Review Quiz

Take the quiz and record your score on your grading sheet. You may use a calculator unless otherwise specified. After the quiz, make sure you review what you missed.

1. Which function is graphed below?



A) $y = x^2 + 1$ B) $y = x^2 - 1$

C) $y = (x + 1)^2$ D) $y = (x - 1)^2$

2. $f(x) = x^2 + 4x + 5$

What is the vertex of the graph of the function above?

3. $f(x) = 2(x - 1)(x - k)$

If the graph of the function above has the axis of symmetry at $x = 3$, what is the value of k ?

4. $f(x) = (x + 1)^2 - 4$

If the graph of the function above intersects the x-axis at $(p, 0)$ and $(q, 0)$, what is the value of $p + q$?

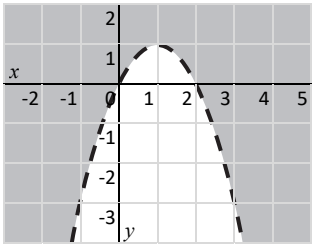
5. $f(x) = x^2 + 8x + k$

For what value of k does the graph of the function above have one x-intercept?

6. The graph of $f(x) = x^2$ is stretched vertically by 2, reflected over the x-axis, and shifted up 3 units to obtain the graph of $g(x)$. Write $g(x)$ in vertex form.

7. Write a quadratic function, $f(x)$, in standard form that passes through $(0, -6)$ and has zeros at -1 and 2.

8. Write the quadratic inequality graphed below in standard form.



9. $x^2 - 5x + 2 \leq x - 6$

Solve the quadratic inequality above.

10. $h(t) = -16t^2 + 64$

A ball is dropped from a height of 64 m. The function above gives its height h, in feet, after t seconds. How long will it take for the ball to hit the ground?