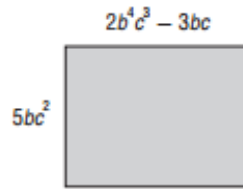


Math III Spiral Review 2 {due Friday, February 26}

1. Write an expression for the area of the rectangle below.

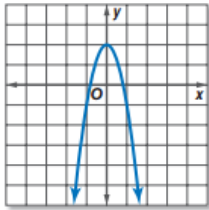


- F $10b^5c^5 - 3bc$
 G $10b^5c^5 - 15b^2c^3$
 H $2b^5c^5 - 3b^2c^3$
 J $10b^4c^6 - 15bc^2$

Describe how the graph of each function is related to the graph of $f(x) = x^2$.

8. $g(x) = x^2 - 5$
 9. $g(x) = -3x^2$
 10. $h(x) = \frac{1}{2}x^2 + 4$

2. **MULTIPLE CHOICE** Which is an equation for the function shown in the graph?



- A $y = -3x^2$
 B $y = 3x^2 + 1$
 C $y = x^2 + 2$
 D $y = -3x^2 + 2$

3. Describe the transformations needed to obtain the graph of $g(x)$ from the graph of $f(x)$. (Lesson 9-3)

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

$$g(x) = x^2 - 1$$

4. Describe the transformations needed to obtain the graph of $g(x)$ from the graph of $f(x)$. (Lesson 9-3)

$$f(x) = x^2 - 6$$

$$g(x) = x^2 + 3$$

5. What value of the vertex do you use to identify as a maximum or minimum?
 6. When a quadratic is in standard form, what term {a,b, or c}, is the y intercept when x is zero?
 7. Given a data set, describe how to find the mean and standard deviation using calculator steps.