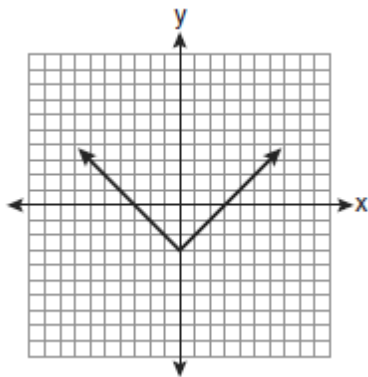


NAME: \_\_\_\_\_

1. 080925ia, P.I. A.G.4

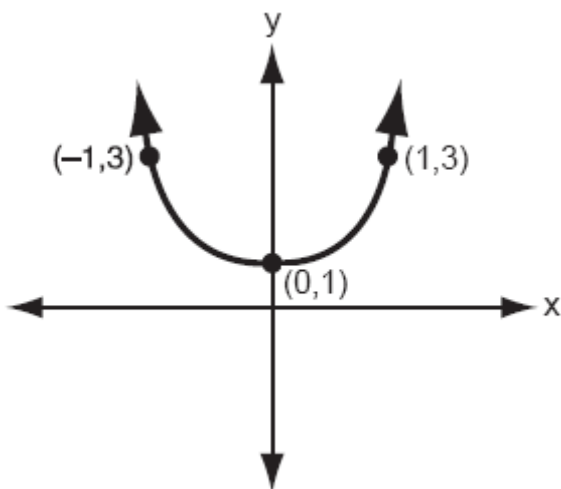
Which equation is represented by the graph below?



- [A]  $y = |x - 3|$  [B]  $y = |x| - 3$   
 [C]  $y = (x - 3)^2$  [D]  $y = x^2 - 3$

2. 010801b, P.I. A.G.4

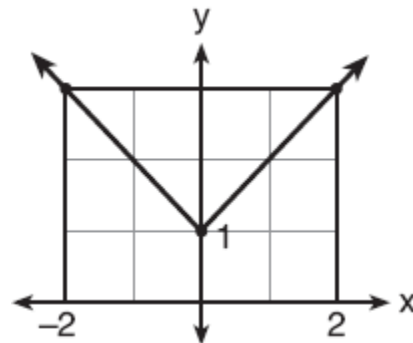
Which equation is represented by the accompanying graph?



- [A]  $y = 2x^2$  [B]  $y = x^2$   
 [C]  $y = 2(x^2 + 1)$  [D]  $y = 2x^2 + 1$

3. 080707b, P.I. A.G.4

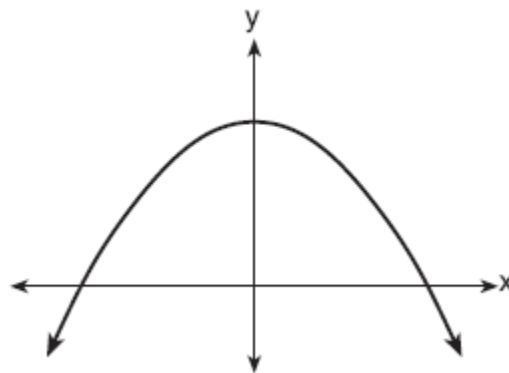
Which equation represents the function shown in the accompanying graph?



- [A]  $f(x) = |x - 1|$  [B]  $f(x) = |x| + 1$   
 [C]  $f(x) = |x| - 1$  [D]  $f(x) = |x + 1|$

4. 060703b, P.I. A.G.4

Which equation is best represented by the accompanying graph?

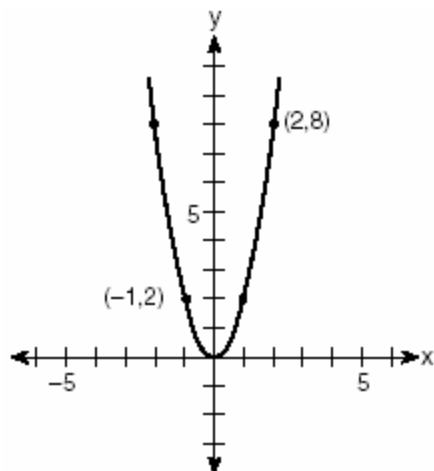


- [A]  $y = 6^x$  [B]  $y = -x^2 + 1$   
 [C]  $y = 6x^2$  [D]  $y = 6x + 1$

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5. 060404b, P.I. A.G.4

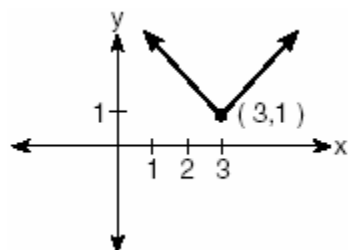
Which quadratic function is shown in the accompanying graph?



- [A]  $y = \frac{1}{2}x^2$       [B]  $y = -\frac{1}{2}x^2$   
 [C]  $y = 2x^2$       [D]  $y = -2x^2$

6. 060314b, P.I. A.G.4

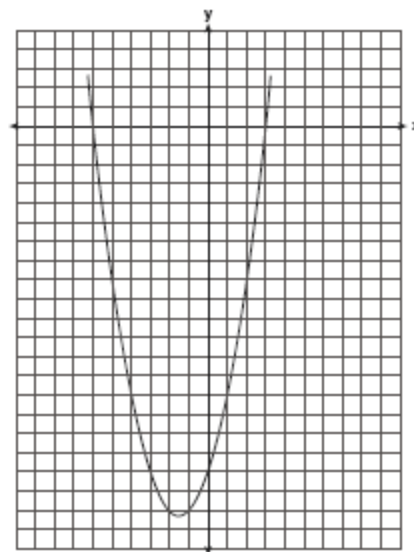
Which equation is represented by the accompanying graph?



- [A]  $y = (x - 3)^2 + 1$       [B]  $y = |x + 3| - 1$   
 [C]  $y = |x| - 3$       [D]  $y = |x - 3| + 1$

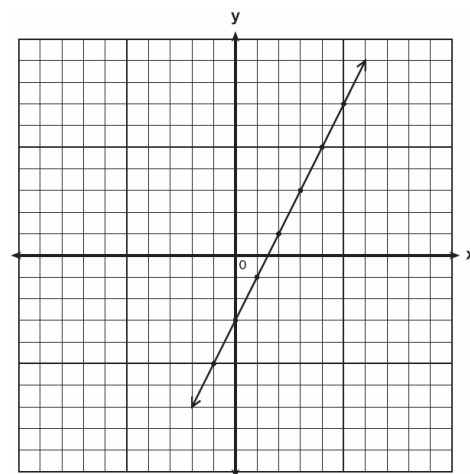
7. 010328a, P.I. A.G.4

The graph of a quadratic equation is shown in the accompanying diagram. The scale on the axes is a unit scale. Write an equation of this graph in standard form.



8. 060225a, P.I. A.G.4

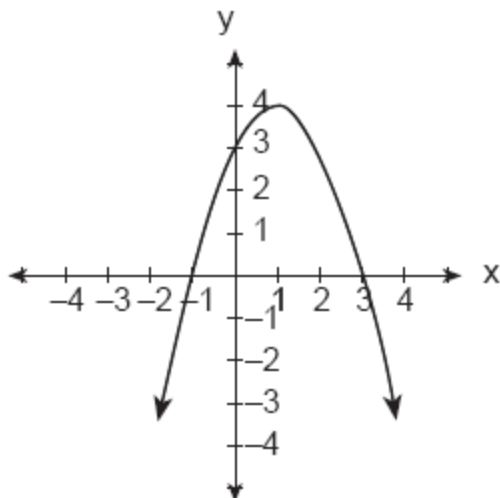
Write the equation for the line shown in the accompanying graph. Explain your answer.



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9. 080017a, P.I. A.G.4

Which is an equation of the parabola shown in the accompanying diagram?



[A]  $y = -x^2 - 2x + 3$       [B]  $y = -x^2 + 2x + 3$

[C]  $y = x^2 + 2x + 3$       [D]  $y = x^2 - 2x + 3$

[1] B \_\_\_\_\_

[2] D \_\_\_\_\_

[3] B \_\_\_\_\_

[4] B \_\_\_\_\_

[5] C \_\_\_\_\_

[6] D \_\_\_\_\_

[3]  $y = x^2 + 3x - 18$ , and appropriate work leading from the roots to the equation is shown.

[2] Appropriate work is shown, but one computational error is made.

or [2]  $x^2 + 3x - 18 = 0$ , but appropriate work is shown.

or [2] Only the correct factors  $(x + 6)$  and  $(x - 3)$  are shown.

[1] Appropriate work is shown, but more than one computational error is made.

or [1] Only the roots  $-6$  and  $3$  are shown, such as  $x = -6$ ,  $x = 3$ .

or [1]  $y = x^2 + 3x - 18$ , but no work is shown.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[7] incorrect procedure. \_\_\_\_\_

[2]  $y = 2x - 3$  or an equivalent equation, and appropriate work is shown, or an appropriate explanation is given, such as the slope is 2 and the  $y$ -intercept is  $-3$ .

[1]  $y = 2x - 3$ , but the slope and intercept are incorrect, or the explanation is not given or is incorrect, such as  $m = 2$  and  $b = -3$ .

or [1] The slope and intercept are explained correctly, but the equation is incorrect.

or [1]  $y = 2x - 3$ , but no work is shown and no explanation is given.

[0] The equation is incorrect, and the explanation of slope and intercept is not given or is incorrect.

or [0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an

[8] obviously incorrect procedure. \_\_\_\_\_

[9] B \_\_\_\_\_