NAME DATE PERIOD

Lesson 4: Square Deal

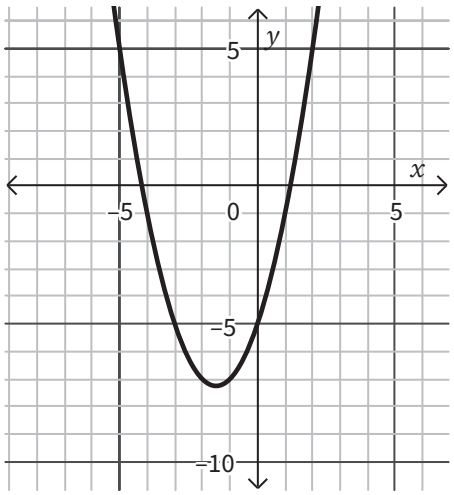
Ready, Set, Go

Ready

State the y-intercept for each of the graphs. Then, match the graph with its equation.

A. $f(x) = -x^2 + 2x - 1$	B. $f(x) = -0.25x^2 - 2x + 5$	C. $f(x) = x^2 + 3x - 5$
D. $f(x) = 0.5x^2 + x - 7$	E. $f(x) = -0.25x^2 + 3x + 1$	F. $f(x) = x^2 - 4x + 4$

1.

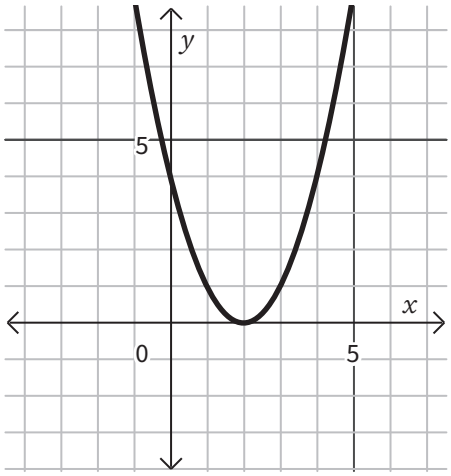


y-intercept =

Equation:

NAME DATE PERIOD

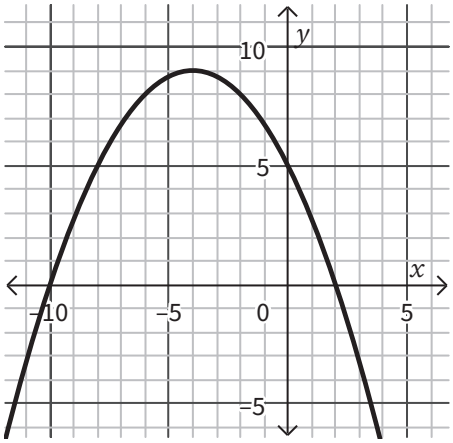
2.



y-intercept =

Equation:

3.

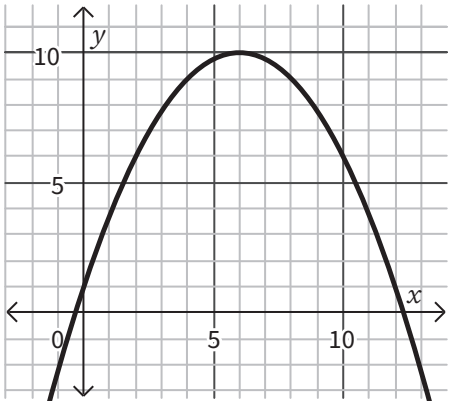


y-intercept =

Equation:

NAME DATE PERIOD

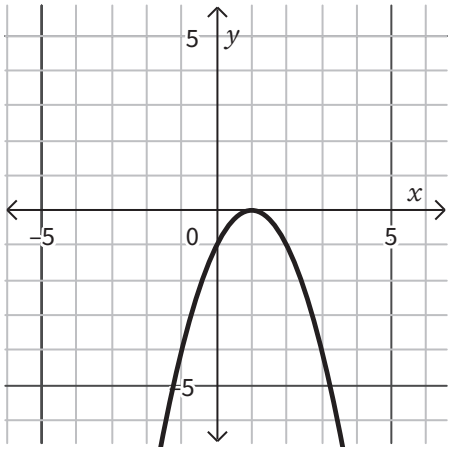
4.



y-intercept =

Equation:

5.

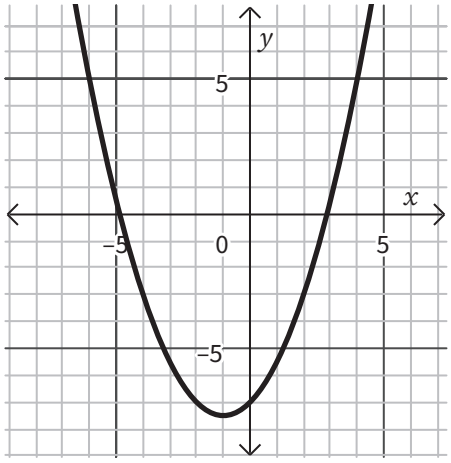


y-intercept =

Equation:

NAME DATE PERIOD

6.



y-intercept =

Equation:

Set

Fill in the missing value so that each expression will connect with 5 perfect squares. Then state the dimensions of the squares in each problem.

7. $5x^2 + 30x + \_\_\_\_\_$

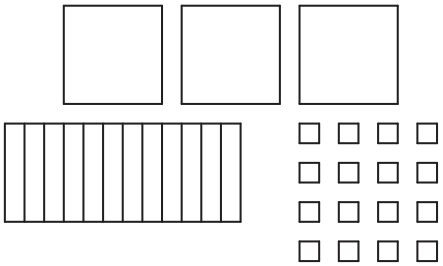
8. $5x^2 - 50x + \_\_\_\_\_$

9. $5x^2 + 10x + \_\_\_\_\_$

10. Given the following scrambled diagram, write two equivalent equations for the area.

NAME DATE PERIOD

11. Given the scrambled diagram below, write two equivalent equations for the area.



The equations show one way to represent the area. Create another equation that also represents the area and is based on the closest perfect square for the area.

12. $A(x) = x^2 + 10x + 14$

13. $A(x) = x^2 + 16x + 6$

14. $A(x) = 3x^2 + 18x - 12$

Go

Find the indicated function value when $f(x) = 4x^2 - 3x - 25$ and $g(x) = -2x^2 + x - 5$.

15. $f(1)$

16. $f(5)$

17. $g(10)$

NAME DATE PERIOD

18. $g(-5)$

19. $f(0) + g(0)$