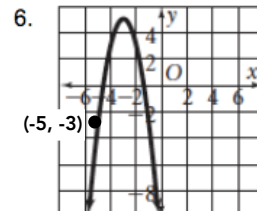
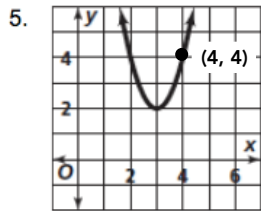
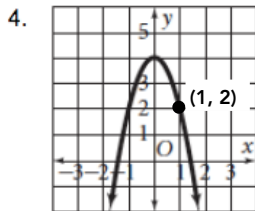
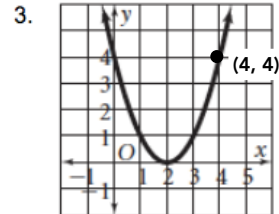
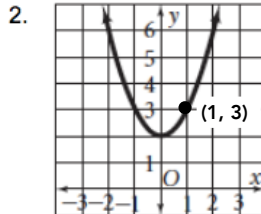
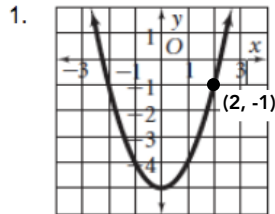


Write the equation of the parabola in vertex form.

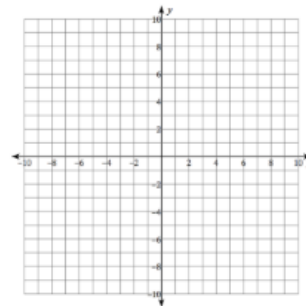
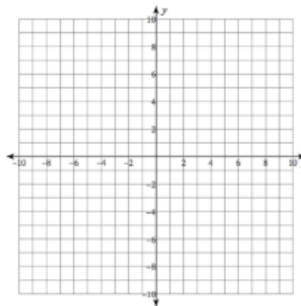
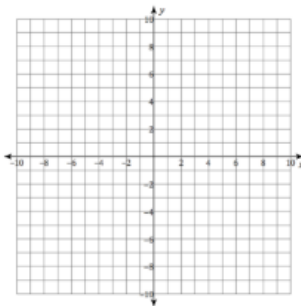


Graph each function.

7. $y = (x - 2)^2 - 3$

8. $y = (x - 6)^2 + 6$

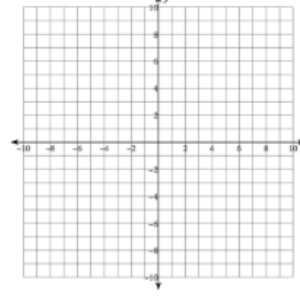
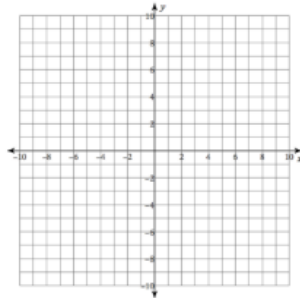
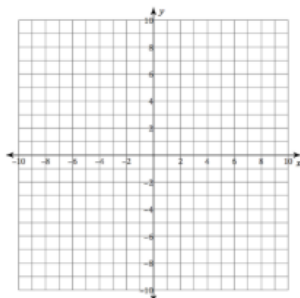
9. $y = \frac{1}{2}(x - 1)^2 - 1$



10. $y = 8(x + 1)^2 - 2$

11. $y = -3(x - 1)^2 + 3$

12. $y = 3(x + 2)^2 + 4$



Write each function in vertex form.

19. $y = x^2 + 4x$

20. $y = 2x^2 + 8x + 3$

21. $y = -2x^2 - 8x$

22. $y = -x^2 + 4x + 4$

23. $y = x^2 - 4x - 4$

24. $y = x^2 + 5x$

Write each function in standard form.

31. $y = 3(x - 2)^2 - 4$

32. $y = -(1/3)(x + 6)^2 + 5$

33. $y = 2(x - 1)^2 - 1$

ANSWERS:

1. $y = x^2 - 5$ 2. $y = x^2 + 2$ 3. $y = (x - 2)^2$
 4. $y = -2x^2 + 4$ 5. $y = 2(x - 3)^2 + 2$
 6. $y = -2(x + 3)^2 + 5$

19. $y = (x + 2)^2 - 4$ 20. $y = 2(x + 2)^2 - 5$
 21. $y = -2(x + 2)^2 + 8$ 22. $y = -(x - 2)^2 + 8$
 23. $y = (x - 2)^2 - 8$ 24. $y = \left(x + \frac{5}{2}\right)^2 - \frac{25}{4}$

31. (2, -4); 8 32. (-6, 5); -7 33. (1, -1); 1

