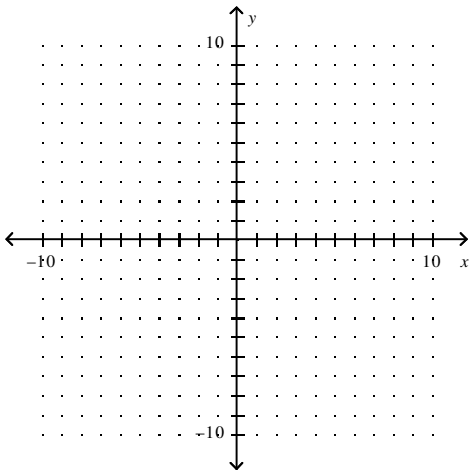
Name_____ 4.1-4.2 Quiz Remediation Problems

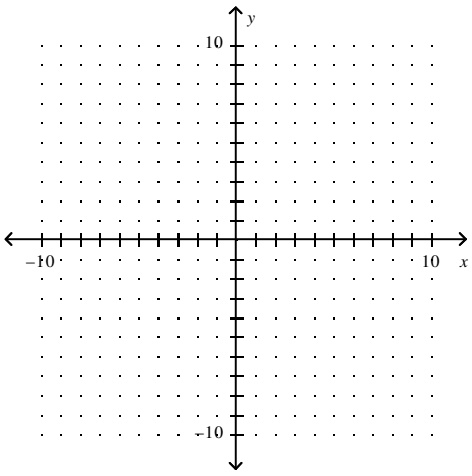
Complete each problem. For each four problems done correctly, you will receive 1 point on your quiz. The maximum score you can receive on the quiz will be 23 points out of 29. YOU MUST SHOW ALL WORK IN ORDER TO RECEIVE CREDIT. **Due date: Monday, December 2.**

Graph the function. Label the vertex and axis of symmetry, and at least 4 other points.

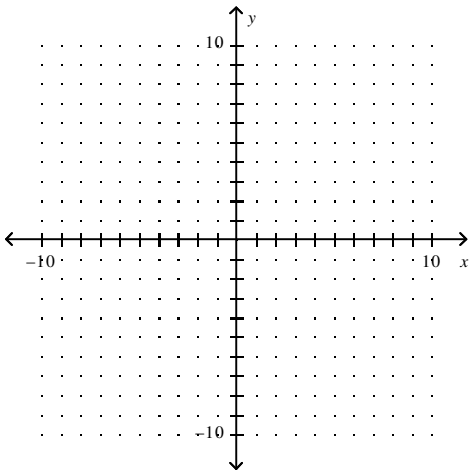
1. $y = x^2 + 2$



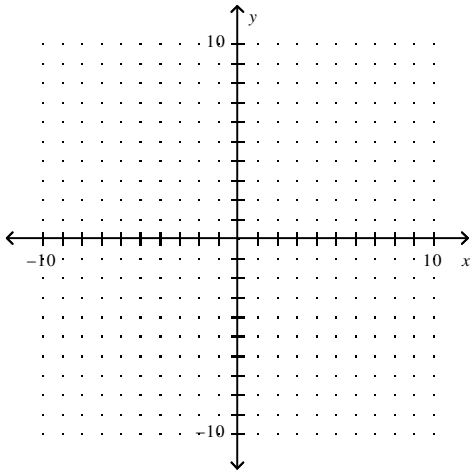
2. $y = -x^2 - 4x$



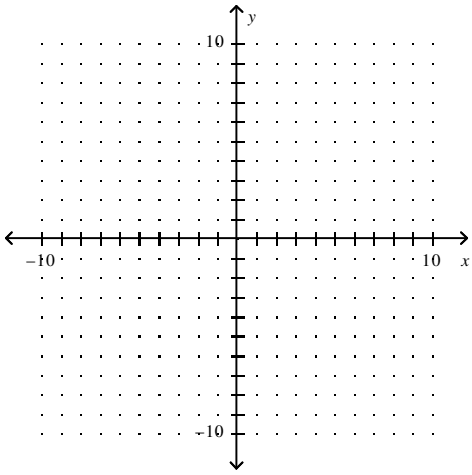
3. $y = \frac{1}{2}x^2 - 2x - 2$



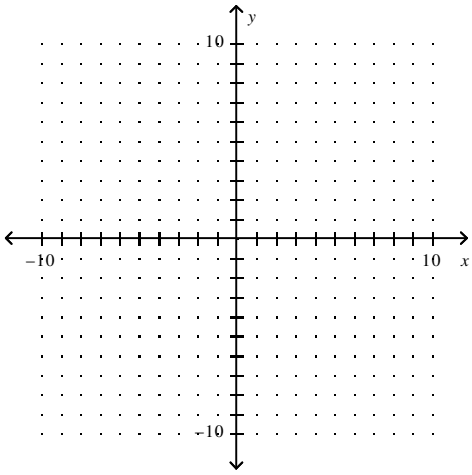
4. $y = 4x^2 + 8x + 1$



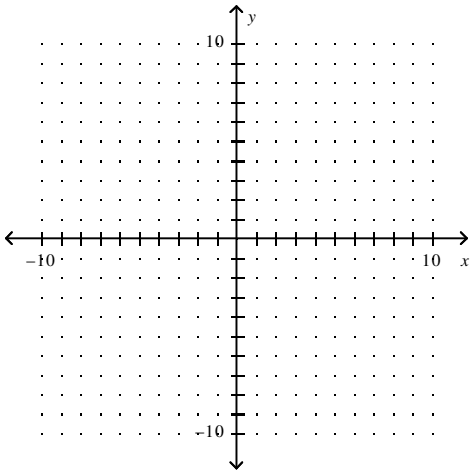
5. $y = (x - 7)^2 + 7$



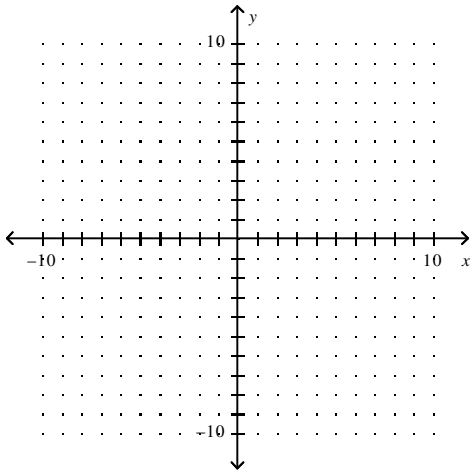
6. $y = 2(x + 3)^2 - 5$



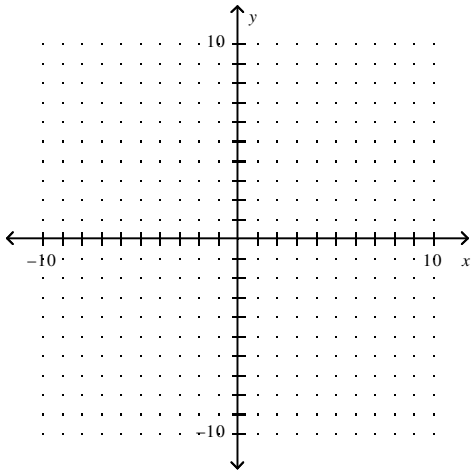
7. $y = \frac{1}{2}(x + 4)^2 + 2$



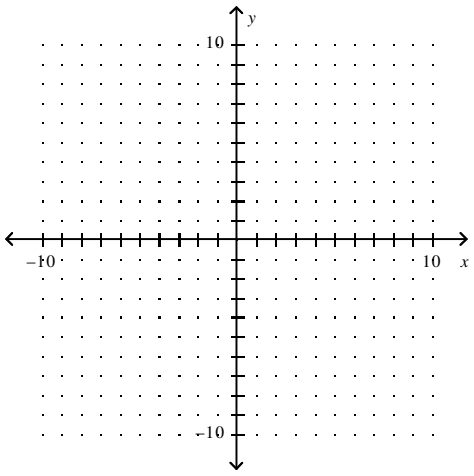
8. $y = -(x + 1)^2 - 4$



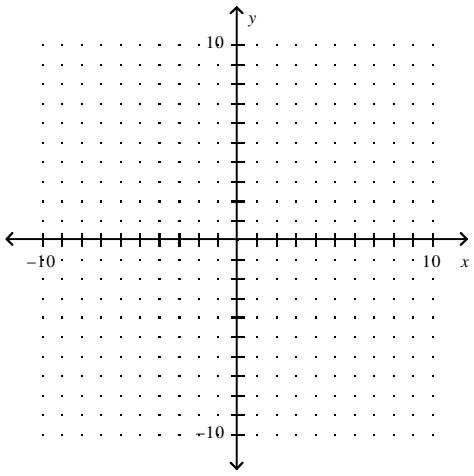
9. $y = (x - 1)(x - 5)$



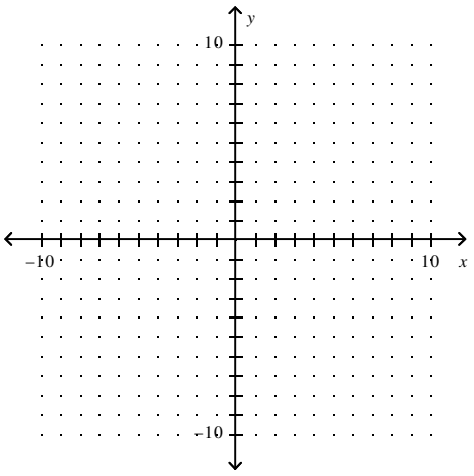
10. $y = (x + 6)(x + 2)$



11. $-3(x - 1)(x + 4)$



12. $y = (x + 2)(x - 4)$



Write the quadratic function in standard form.

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

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

15. $y = 3(x - 3)^2 - 12$

16. $y = 4(x + 1)(x + 2)$

17. $y = -3(x - 3)(x + 2)$

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

19. $y = 2(x + 1)(x + 4)$

20. $y = -3(x - 2)(x + 3)$

Describe how each graph relates to the parent graph $y = x^2$. Identify any vertical stretches or shrinks, reflections, and horizontal and vertical translations.

21. $y = -2(x + 7)^2 - 4$

22. $y = \frac{1}{2}(x - 3)^2 + 2$

23. $y = -(x + 2)^2$

24. $y = -\frac{1}{2}(x - 1)^2 + 5$

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

26. $y = \frac{1}{4}(x - 7)^2$

27. $y = -x^2 - 3$

28. $y = (x + 2)^2$