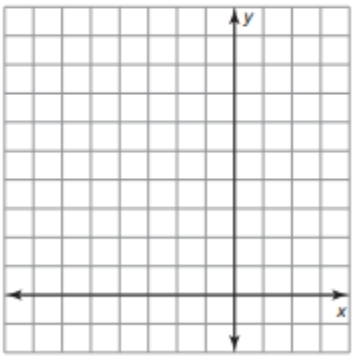
Name _____ Date _____ Pd ____

9.6 WS from the WB

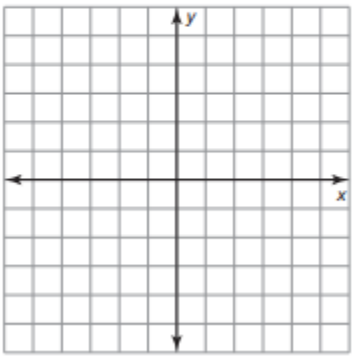
All solutions should be in coordinate form.

1 – 6: Solve by graphing. Be sure to include your work for the vertex, x-intercepts, y-intercept, and t-chart.

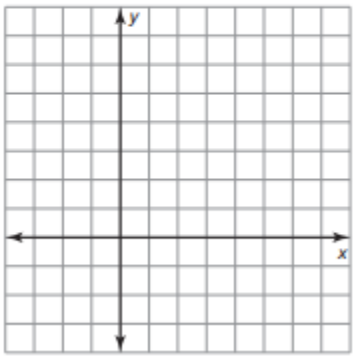
1. $y = x^2 + 5x + 6$
$y = -x + 1$



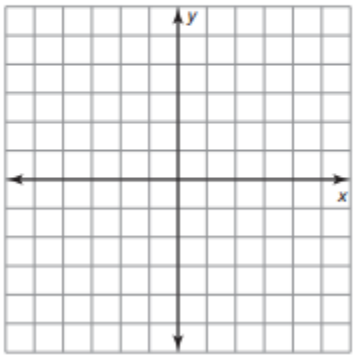
2. $y = x^2 + x - 3$
$y = x + 1$



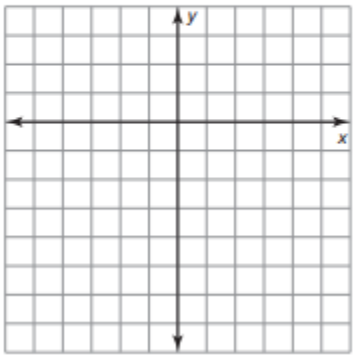
3. $y = \frac{1}{2}x^2 - 2x + 1$
$y = -x + 1$



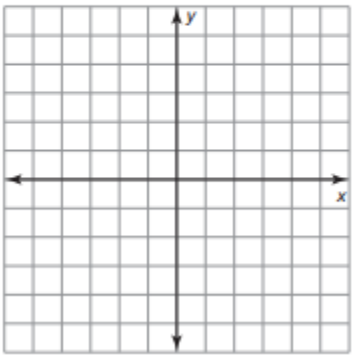
4. $y = -3x^2 - 3x + 2$
$y = 2x$



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



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



7 – 9: Solve the equation by substitution. Show all work.

7. $y - 2 = x^2$
$y = 6$

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

9. $y = x - 4$
$y = x^2 + 3x - 4$

10 – 12: Solve the equation by elimination. Be sure to show all work.

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

11. $y = x^2 + 3x - 5$
$y = 3x - 1$

12. $y = x^2 + x - 2$
$y = x + 14$

13 – 18: Solve the equation by graphing on your calculator. Round your solution(s) to the nearest hundredth, if necessary.

13. $-6x + 14 = x^2 - 9x + 16$

14. $-x^2 + 4x = -2x + 8$

15. $4x^2 - 9 = 4x - 1$

16. $-\frac{1}{2}x + 1 = -x^2 + 4x$

17. $2x^2 - 4 = -x^2 + 6$

18. $-3\left(\frac{2}{3}\right)^x + 2 = x^2 - 2$