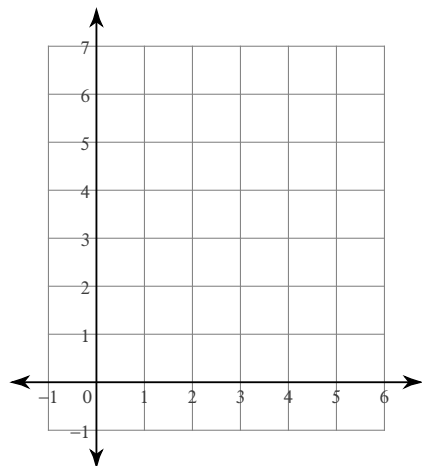


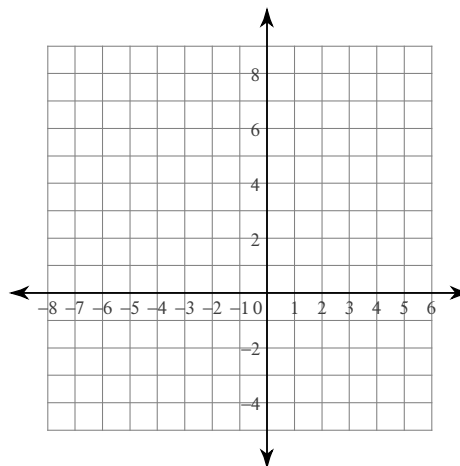
Review Sheet: Quadratic Equations

Name _____
Date _____**Sketch the graph of each function.**

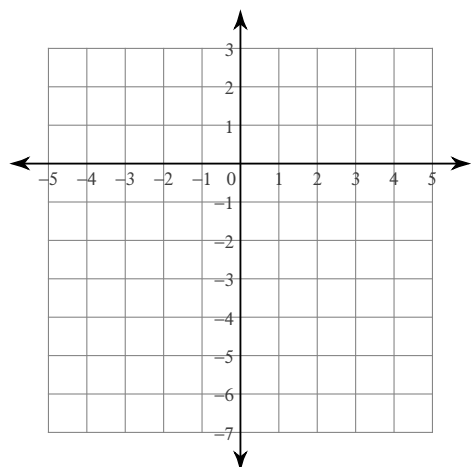
1) $y = x^2 - 8x + 17$



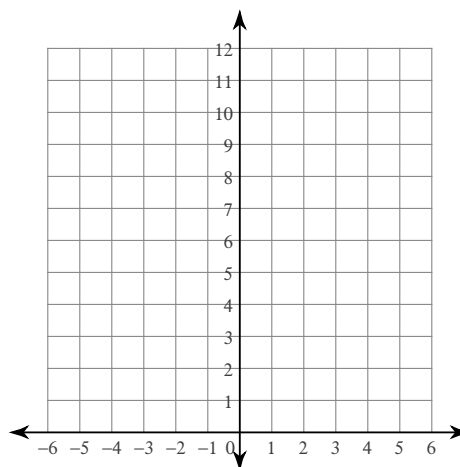
2) $y = 3x^2 + 12x + 8$



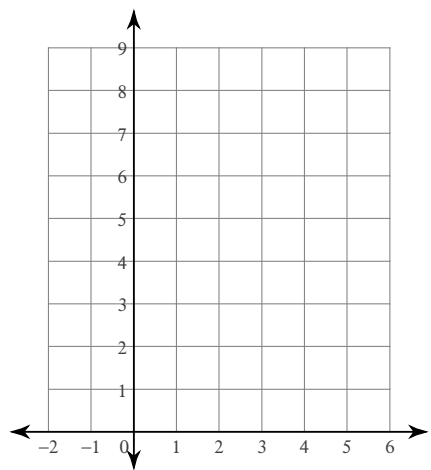
3) $y = -2x^2 + 4x$



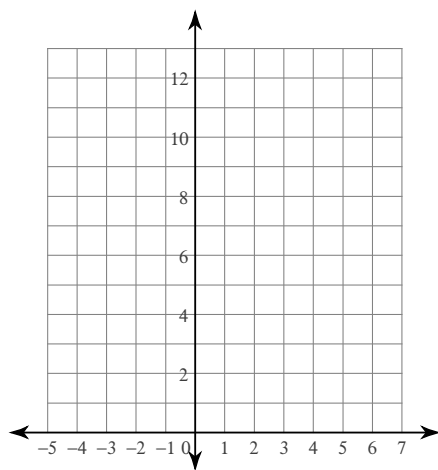
4) $y = 2x^2 + 8x + 11$



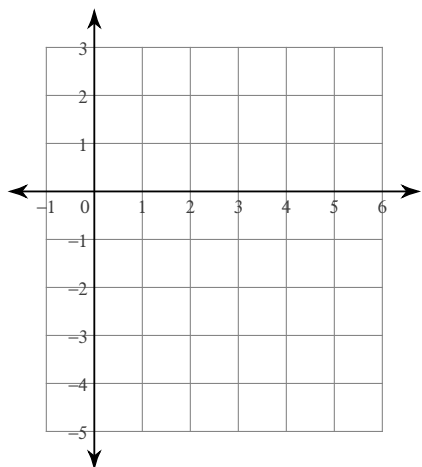
5) $y = x^2 - 2x + 5$



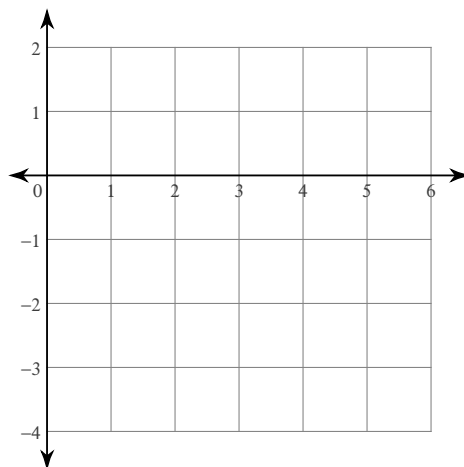
6) $y = 2(x - 2)^2 + 4$



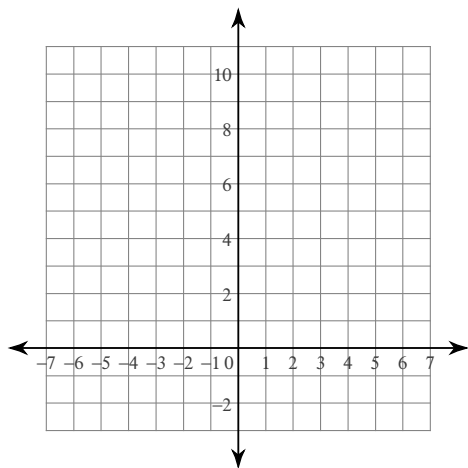
7) $y = (x - 4)^2 - 3$



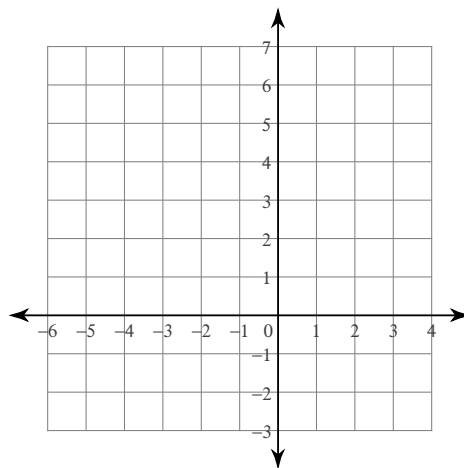
8) $y = -(x - 3)^2 + 1$



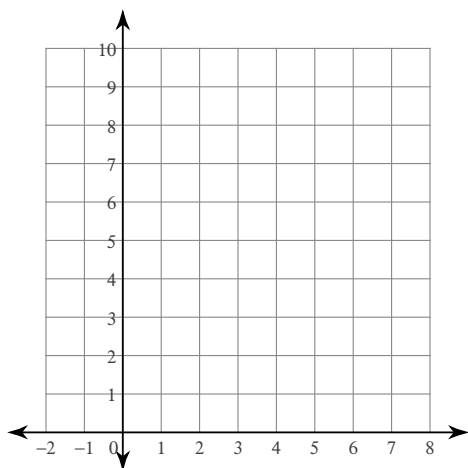
9) $y = 3(x - 2)^2 - 2$



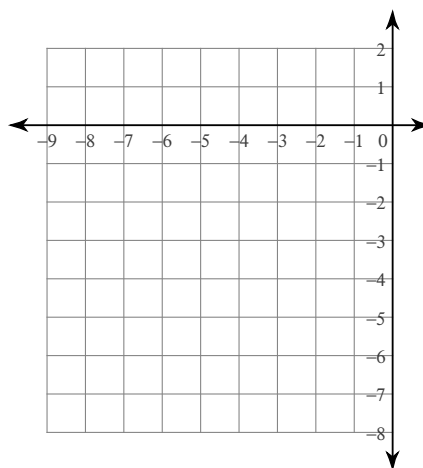
10) $y = 2(x + 1)^2 - 2$



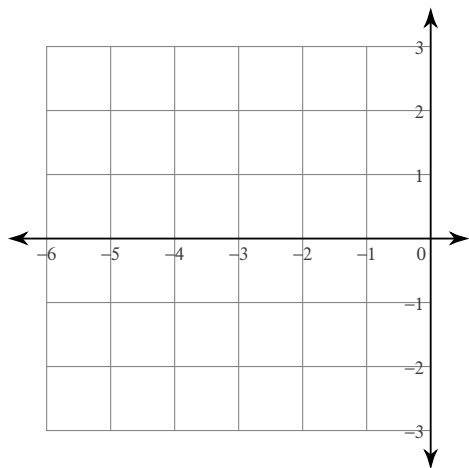
11) $\frac{1}{2}(y - 1) = (x - 3)^2$



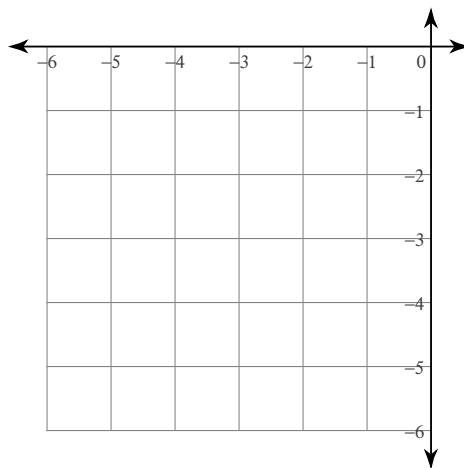
12) $-\frac{1}{2}(y - 1) = (x + 4)^2$



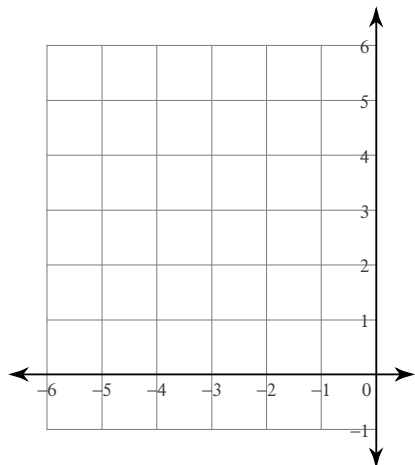
13) $-(y - 2) = (x + 2)^2$



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



15) $3(y - 3) = (x + 3)^2$



Solve each equation by taking square roots.

16) $x^2 = -54$

17) $p^2 = 72$

18) $n^2 = 49$

19) $r^2 - 7 = -5$

20) $-m^2 = -35$

21) $x^2 - 1 = 99$

22) $2n^2 + 3 = 11$

23) $64v^2 + 3 = 28$

24) $10b^2 - 7 = 753$

Solve each equation by factoring.

25) $n^2 + 7n = 0$

26) $b^2 - 4 = 0$

27) $v^2 + 4v - 21 = 0$

28) $x^2 - 9x + 22 = 4$

29) $8x^2 + 96x + 287 = 7$

30) $8a^2 - 16a - 184 = 8$

31) $k^2 - 8 = -2k$

32) $p^2 - 3p = 18$

33) $6x^2 = -72 + 48x$

34) $6n^2 - 18n = 108$

35) $7m^2 - 9m + 14 = 6m^2$

36) $5r^2 + 3r + 2 = 4r^2$

37) $7x^2 + 22x + 3 = 0$

38) $7n^2 - 43n - 42 = 0$

39) $3b^2 - 17b - 28 = 0$

40) $5v^2 + 19v + 8 = -4$

41) $15x^2 - 46x + 18 = 2$

42) $20n^2 - 128n - 261 = -5$

43) $2a^2 = 11a + 40$

44) $3k^2 + 23k = -40$

45) $5x^2 = 64 - 32x$

46) $21n^2 + 133n = 98$

47) $42x^2 + 94x + 41 = 1$

48) $12m^2 - 74m - 238 = -8m + 2$

Solve each equation by completing the square.

49) $x^2 - 4x - 26 = 6$

50) $x^2 + 2x - 43 = -2$

51) $k^2 - 7k + 2 = 4$

52) $a^2 - 19a + 84 = -4$

53) $p^2 - 9 = 8p$

54) $x^2 + 32 = -18x$

Solve each equation with the quadratic formula.

55) $-12n^2 + 10 = 0$

56) $m^2 + 9m + 1 = 0$

57) $-3r^2 - 4r + 23 = 0$

58) $x^2 + 10x + 21 = -4$

59) $6n^2 - 11n - 120 = -8$

60) $-b^2 + 2b + 1 = -7$

61) $-3x^2 - 5x = -100$

62) $-2v^2 = -6v - 80$

63) $-2n^2 = -11n - 13$

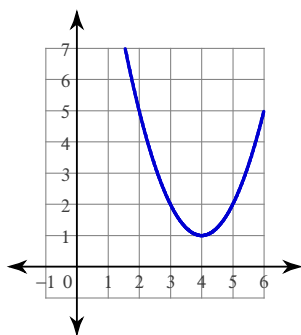
64) $-8k^2 = -12k^2 - 10k - 6$

65) $-a^2 - 22a + 40 = -2a^2 + 4 - 10a$

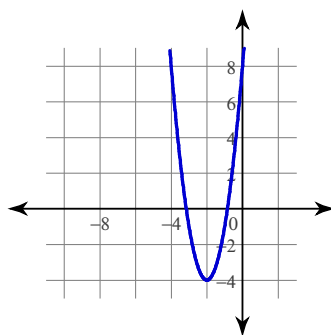
66) $-5x^2 - 2 + 5x = 5x$

Answers to Review Sheet: Quadratic Equations (ID: 1)

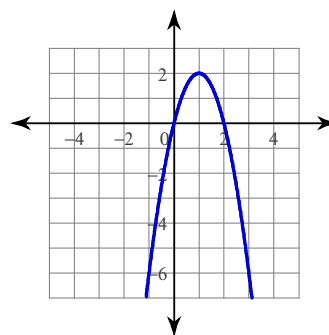
1)



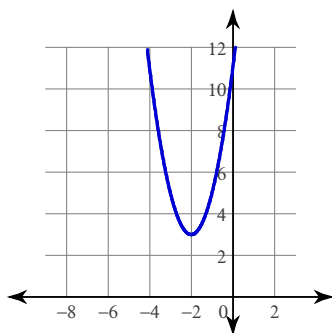
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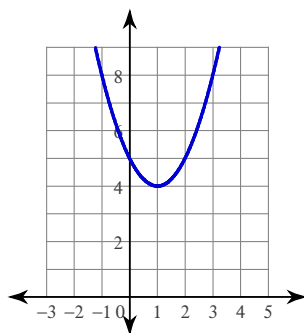
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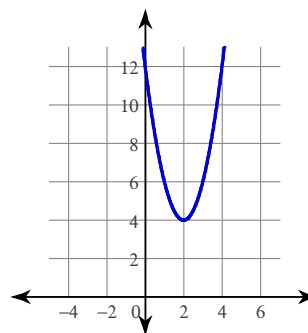
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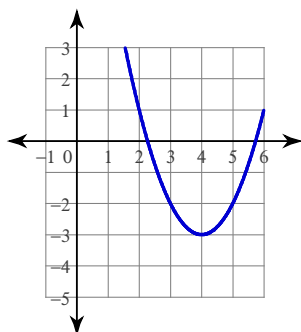
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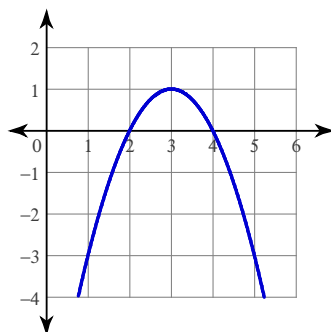
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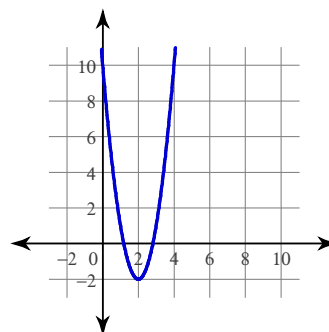
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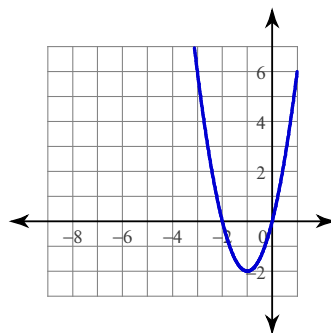
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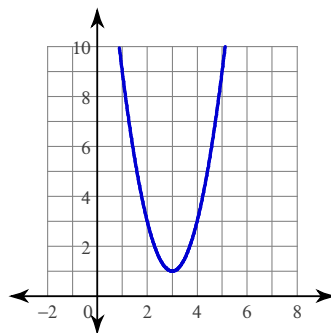
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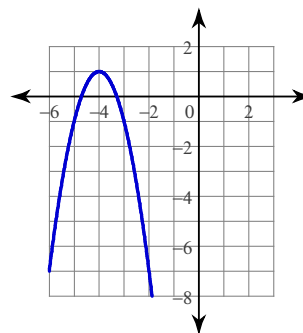
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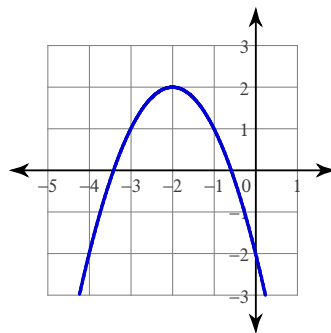
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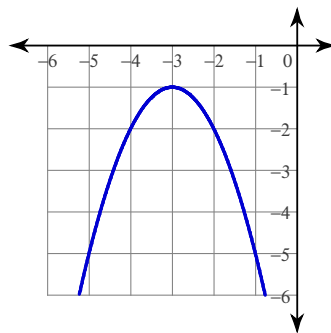
12)



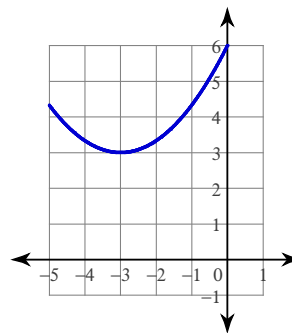
13)



14)



15)



16) No solution.

17) $\{8.485, -8.485\}$

18) $\{7, -7\}$

19) $\{1.414, -1.414\}$

20) $\{5.916, -5.916\}$

21) $\{10, -10\}$

22) $\{2, -2\}$

23) $\{0.625, -0.625\}$

24) $\{8.718, -8.718\}$

25) $\{-7, 0\}$

26) $\{-2, 2\}$

27) $\{-7, 3\}$

28) $\{6, 3\}$

29) $\{-7, -5\}$

30) $\{6, -4\}$

31) $\{2, -4\}$

- | | | | |
|---------------------------------------|---|--------------------------------------|---|
| 32) $\{6, -3\}$ | 33) $\{2, 6\}$ | 34) $\{-3, 6\}$ | 35) $\{2, 7\}$ |
| 36) $\{-2, -1\}$ | 37) $\left\{-\frac{1}{7}, -3\right\}$ | 38) $\left\{-\frac{6}{7}, 7\right\}$ | 39) $\left\{-\frac{4}{3}, 7\right\}$ |
| 40) $\left\{-\frac{4}{5}, -3\right\}$ | 41) $\left\{\frac{8}{3}, \frac{2}{5}\right\}$ | 42) $\left\{-\frac{8}{5}, 8\right\}$ | 43) $\left\{-\frac{5}{2}, 8\right\}$ |
| 44) $\left\{-\frac{8}{3}, -5\right\}$ | 45) $\left\{\frac{8}{5}, -8\right\}$ | 46) $\left\{\frac{2}{3}, -7\right\}$ | 47) $\left\{-\frac{4}{7}, -\frac{5}{3}\right\}$ |
| 48) $\left\{-\frac{5}{2}, 8\right\}$ | 49) $\{8, -4\}$ | 50) $\{5.481, -7.481\}$ | 51) $\{7.275, -0.275\}$ |
| 52) $\{11, 8\}$ | 53) $\{9, -1\}$ | 54) $\{-2, -16\}$ | 55) $\{-0.913, 0.913\}$ |
| 56) $\{-0.113, -8.887\}$ | 57) $\{-3.515, 2.181\}$ | 58) $\{-5\}$ | 59) $\{5.333, -3.5\}$ |
| 60) $\{-2, 4\}$ | 61) $\{-6.667, 5\}$ | 62) $\{-5, 8\}$ | 63) $\{-1, 6.5\}$ |
| 64) $\{-1, -1.5\}$ | 65) $\{6\}$ | 66) No solution. | |