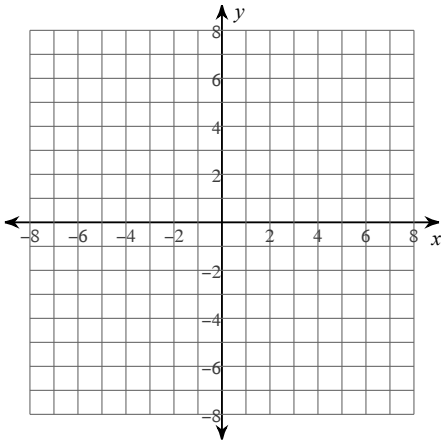


Assignment

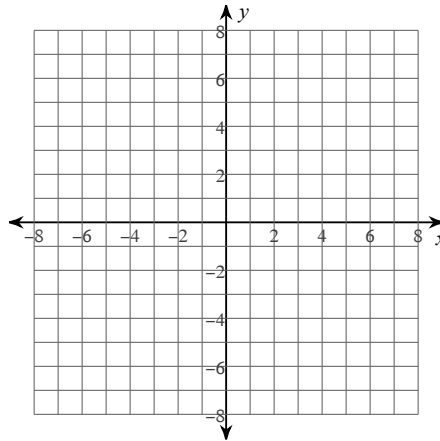
Date _____ Period _____

Identify the vertex, axis of symmetry, and y-intercept of each. Then sketch the graph.

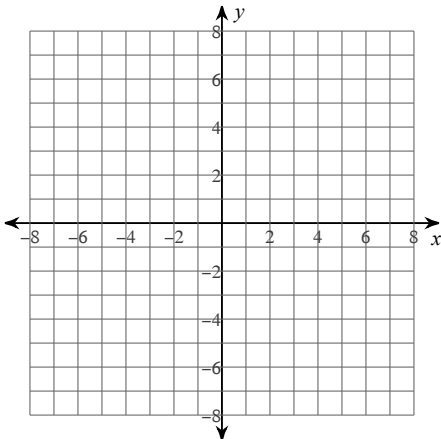
1) $f(x) = -x^2 - 6x - 5$



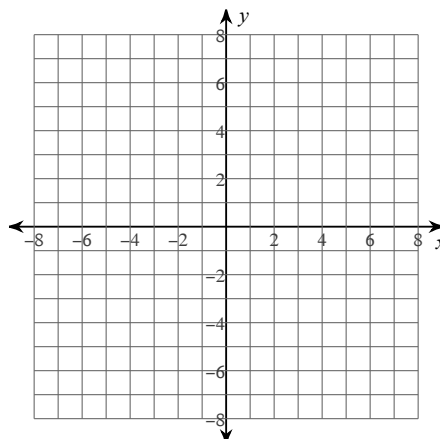
2) $f(x) = -x^2 - 2$



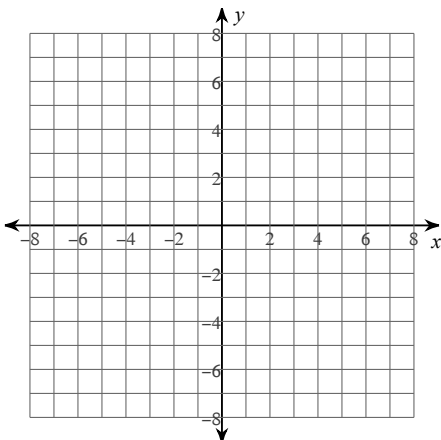
3) $f(x) = -x^2 + 2x - 3$



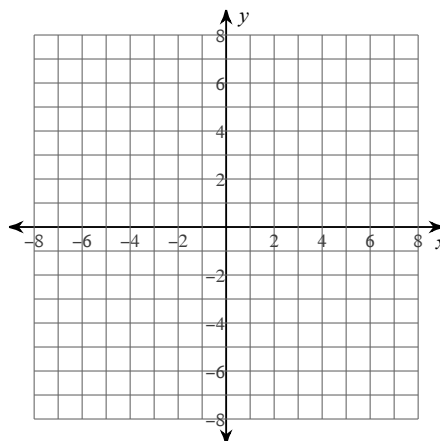
4) $f(x) = -\frac{1}{4}x^2 - 2$



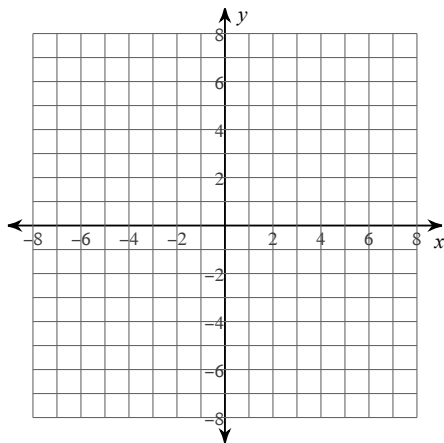
5) $f(x) = -x^2 - 4x - 9$



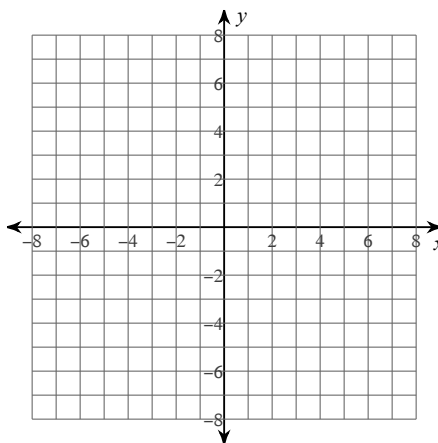
6) $f(x) = \frac{1}{3}x^2 + \frac{8}{3}x + \frac{28}{3}$



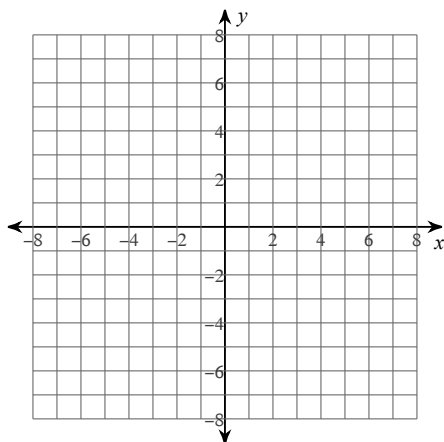
$$7) f(x) = -2x^2 - 4x - 4$$



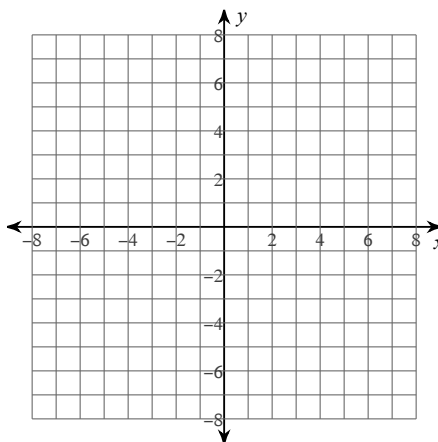
$$8) f(x) = -\frac{1}{4}x^2 - \frac{5}{2}x - \frac{33}{4}$$



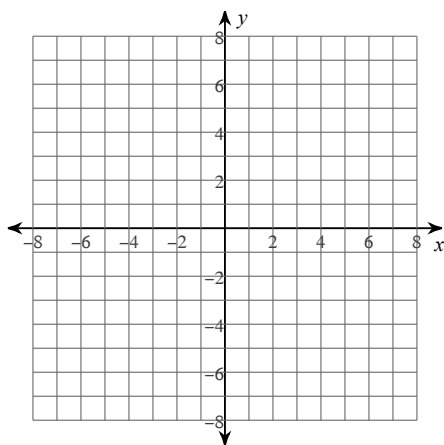
$$9) f(x) = x^2 + 6x + 9$$



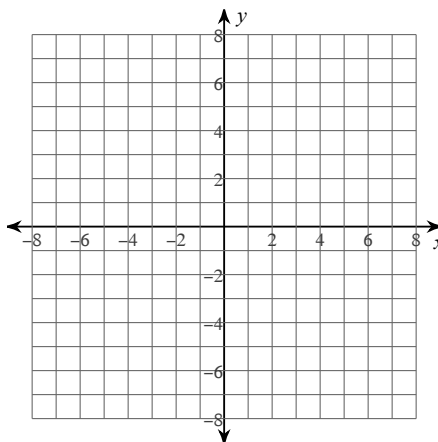
$$10) f(x) = 2x^2 + 12x + 16$$



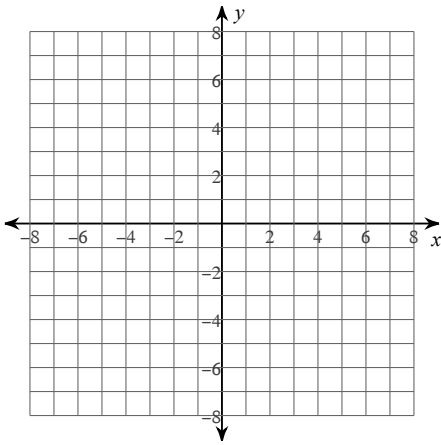
$$11) f(x) = \frac{1}{4}x^2 + 3x + 14$$



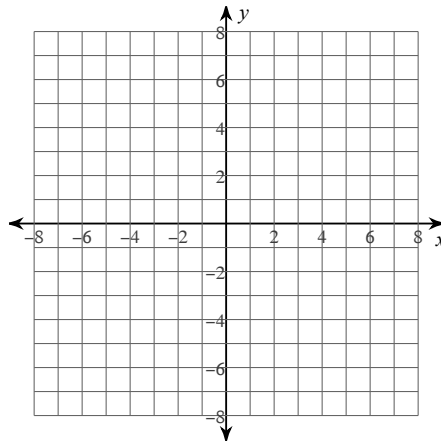
$$12) f(x) = x^2 + 12x + 32$$



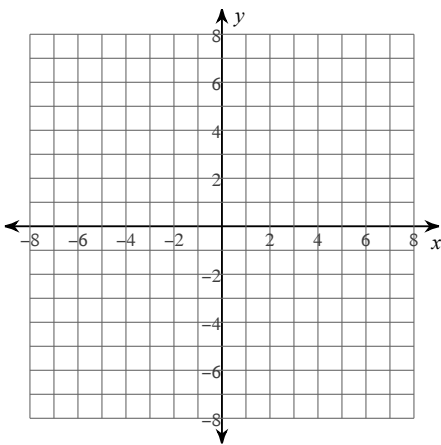
13) $f(x) = -x^2 + 12x - 37$



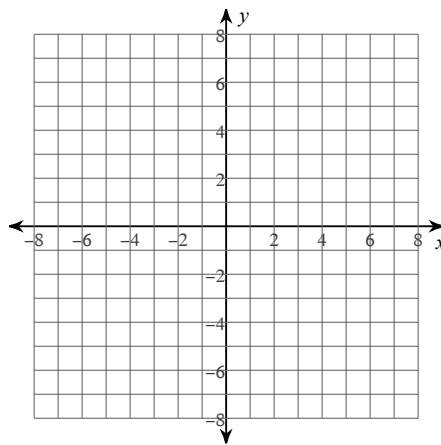
14) $f(x) = -x^2 + 8x - 22$



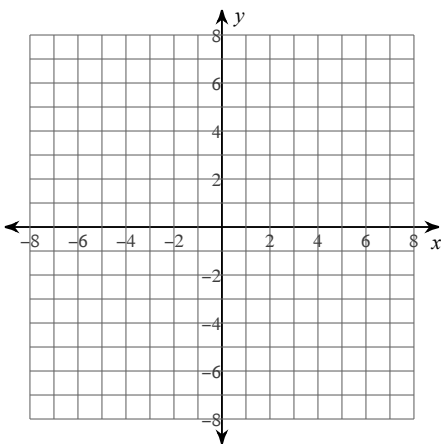
15) $f(x) = 2x^2 + 24x + 66$



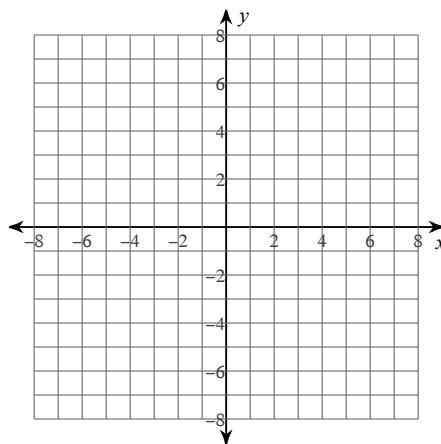
16) $f(x) = -x^2 + 4x - 10$



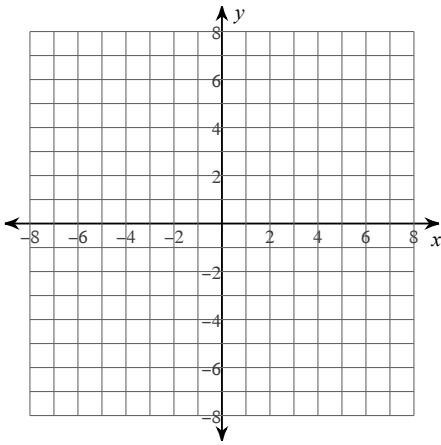
17) $f(x) = 2x^2 - 8x + 3$



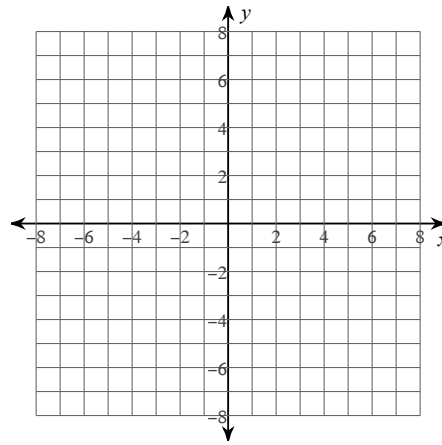
18) $f(x) = -2x^2 - 20x - 55$



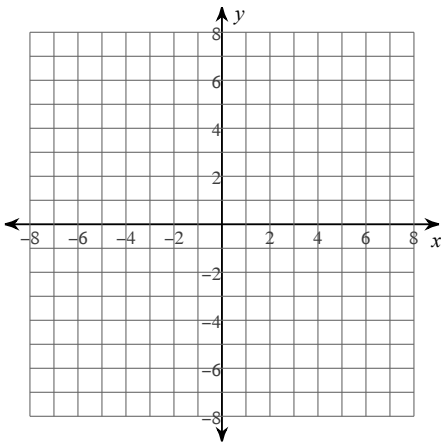
19) $f(x) = 2x^2 - 24x + 69$



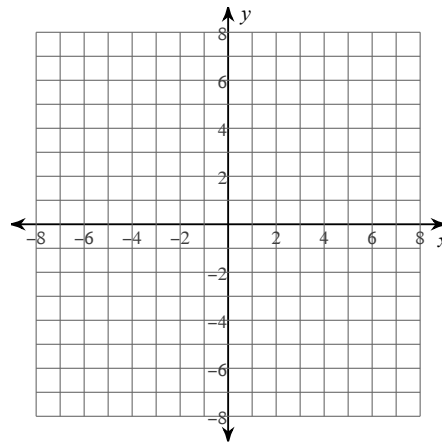
20) $f(x) = -2x^2 - 4$



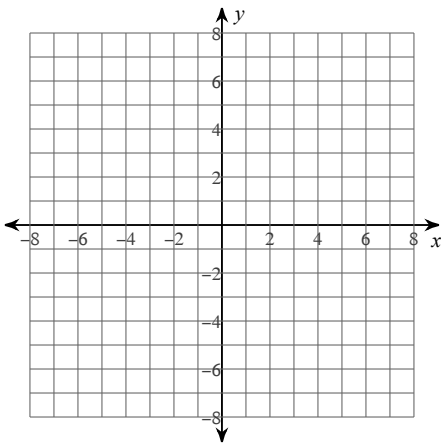
21) $f(x) = 2x^2 + 16x + 32$



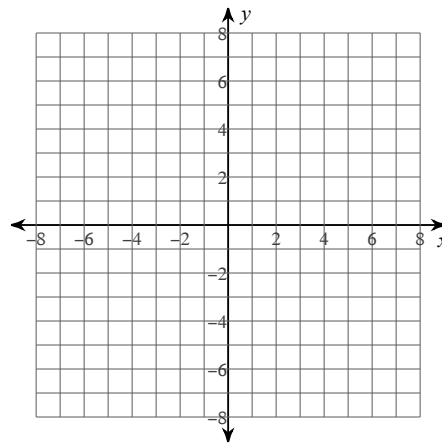
22) $f(x) = -2x^2 + 20x - 52$



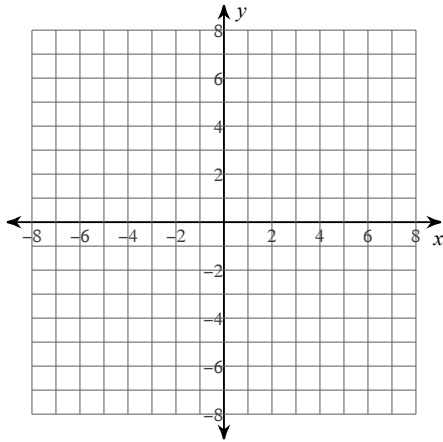
23) $f(x) = -x^2 + 10x - 26$



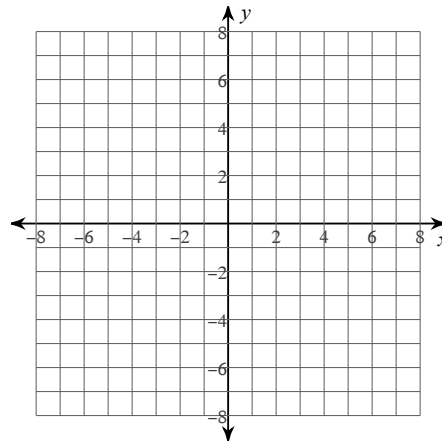
24) $f(x) = x^2 - 6x + 3$



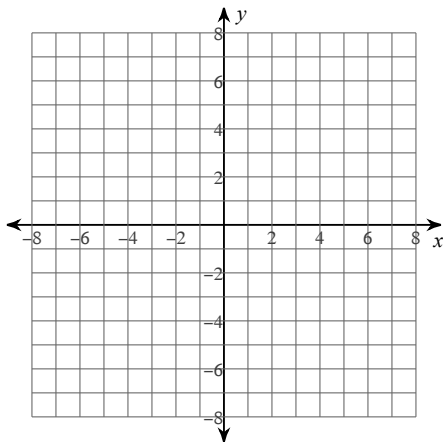
$$25) f(x) = \frac{1}{4}x^2 + 3$$



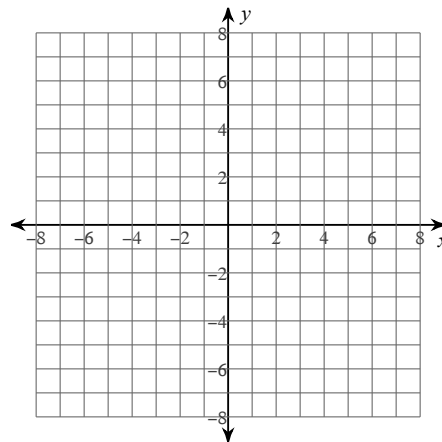
$$26) f(x) = -2x^2 - 16x - 37$$



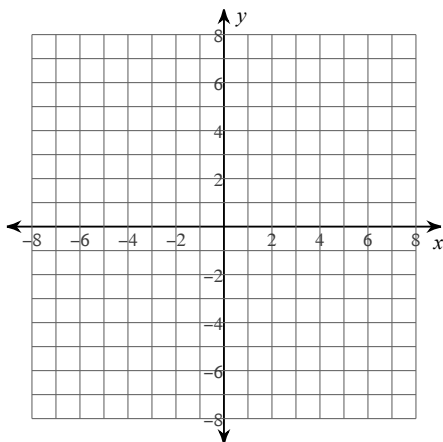
$$27) f(x) = -2x^2 - 20x - 54$$



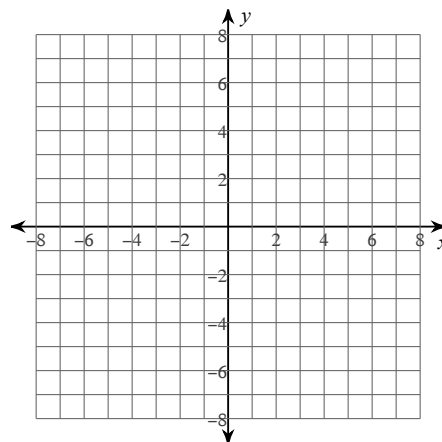
$$28) f(x) = -x^2 - 1$$



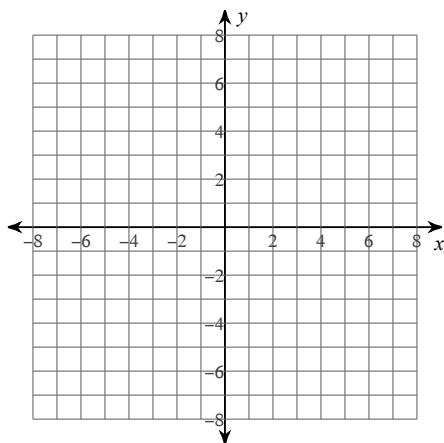
$$29) f(x) = -x^2 + 12x - 41$$



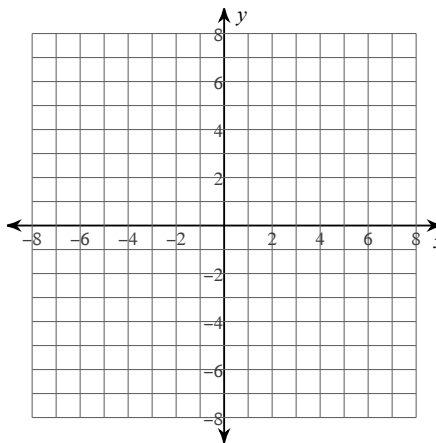
$$30) f(x) = 3x^2 + 24x + 42$$



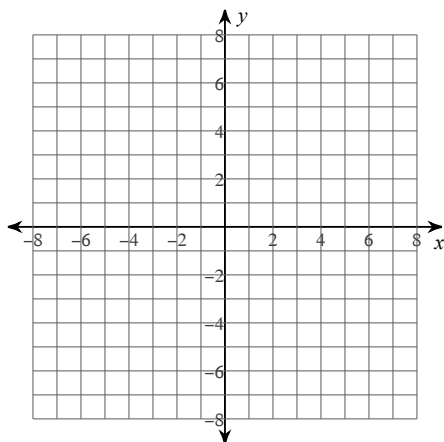
$$31) f(x) = \frac{1}{4}x^2 + \frac{5}{2}x + \frac{33}{4}$$



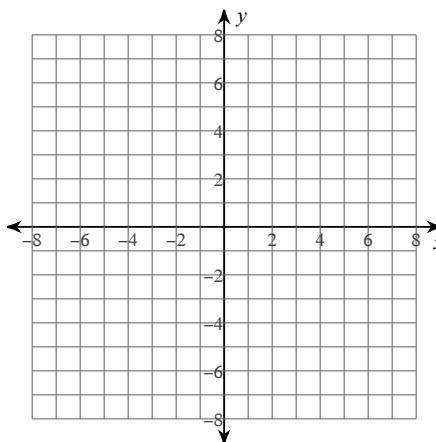
$$32) f(x) = -x^2 + 6x - 8$$



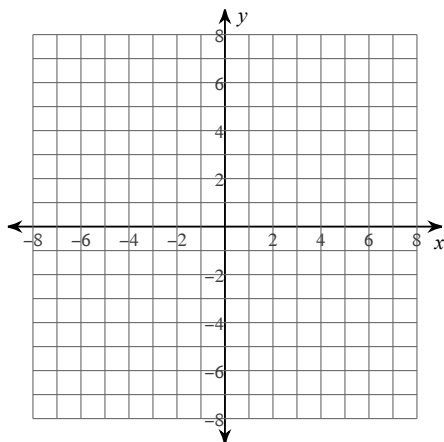
$$33) f(x) = 2x^2 - 12x + 14$$



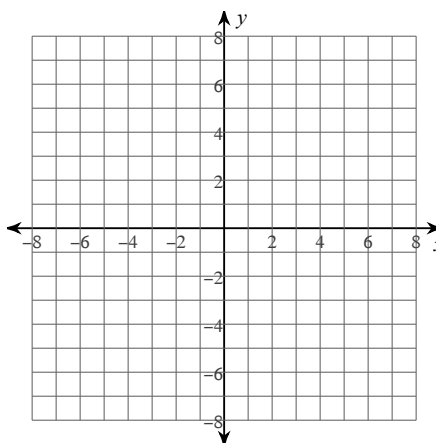
$$34) f(x) = -x^2 + 10x - 22$$



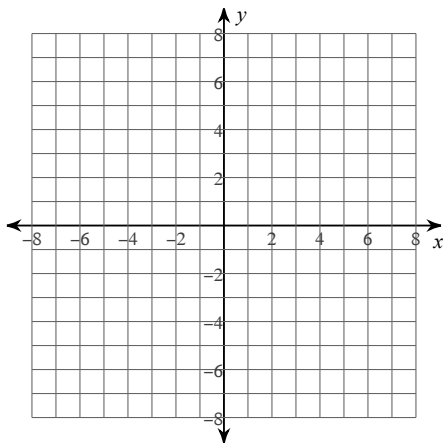
$$35) f(x) = x^2 - 2x + 4$$



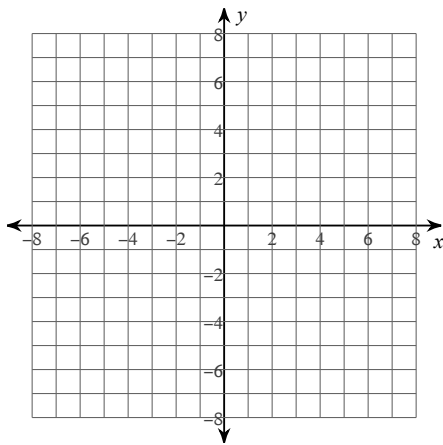
$$36) f(x) = \frac{1}{3}x^2 - \frac{10}{3}x + \frac{37}{3}$$



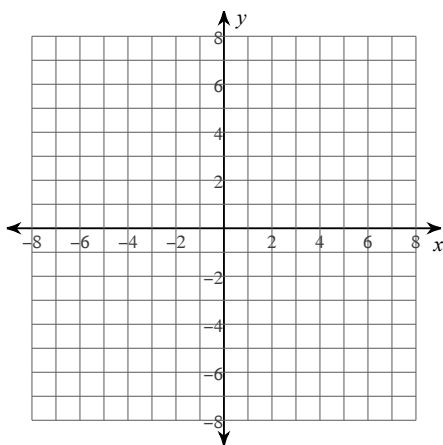
37) $f(x) = -2x^2 - 20x - 50$



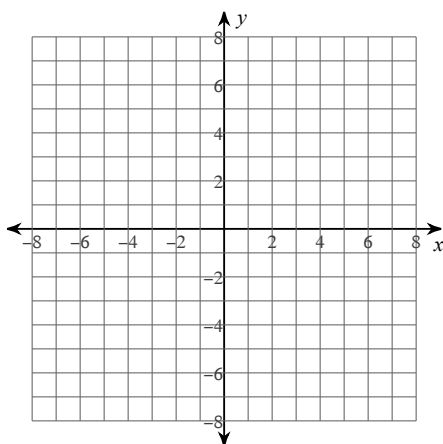
38) $f(x) = -x^2 + 12x - 32$



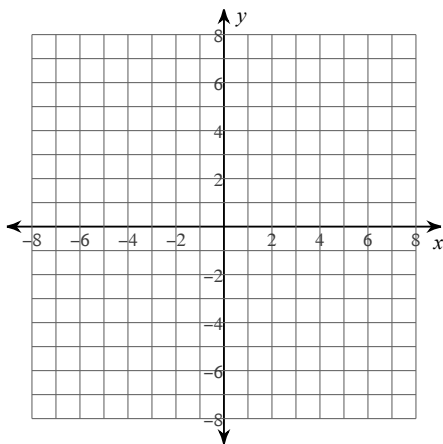
39) $f(x) = -2x^2 - 2$



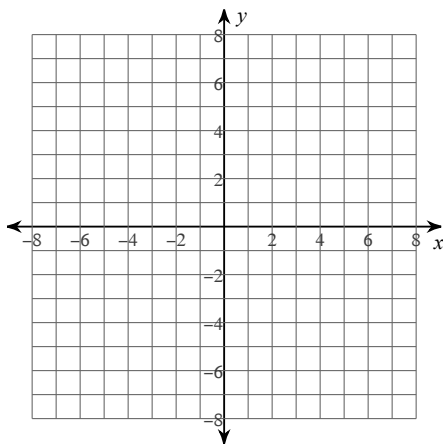
40) $f(x) = -\frac{1}{2}x^2 - 3x - \frac{5}{2}$



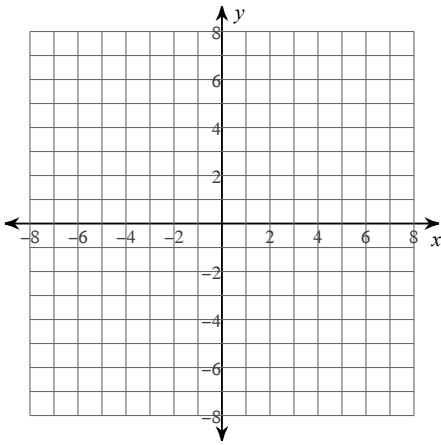
41) $f(x) = -2x^2 - 4x - 2$



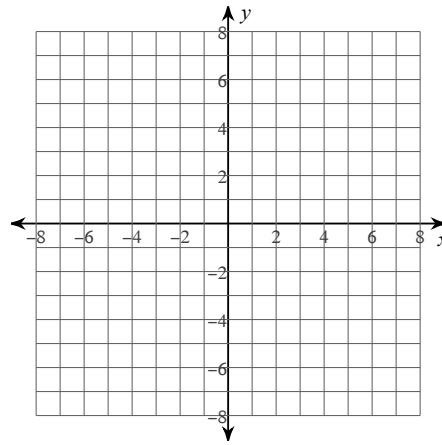
42) $f(x) = x^2 + 12x + 37$



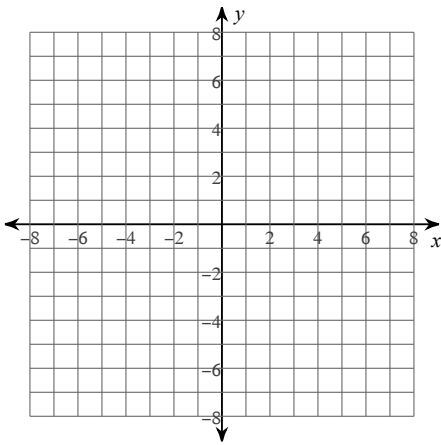
43) $f(x) = 2x^2 - 8x + 7$



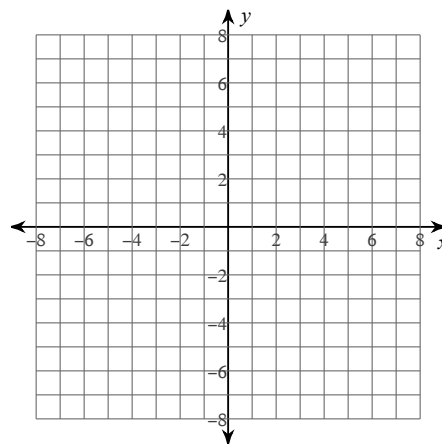
44) $f(x) = -x^2 - 2x + 2$



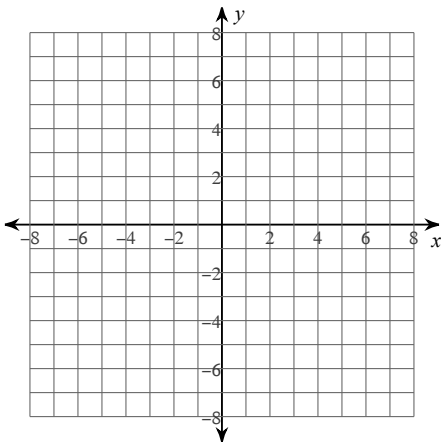
45) $f(x) = -2x^2 - 20x - 53$



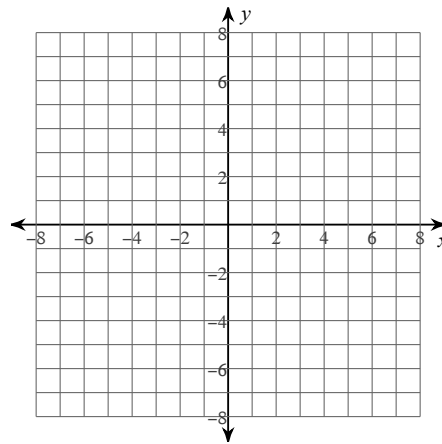
46) $f(x) = -\frac{1}{3}x^2 - \frac{8}{3}x - \frac{34}{3}$



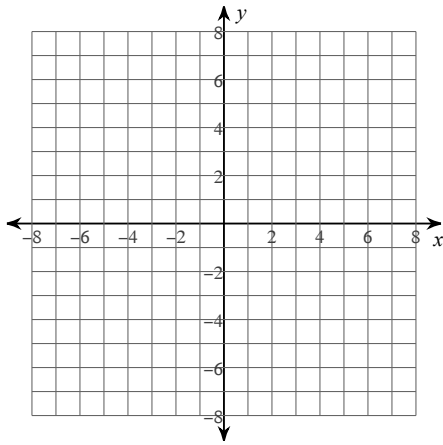
47) $f(x) = x^2 - 12x + 35$



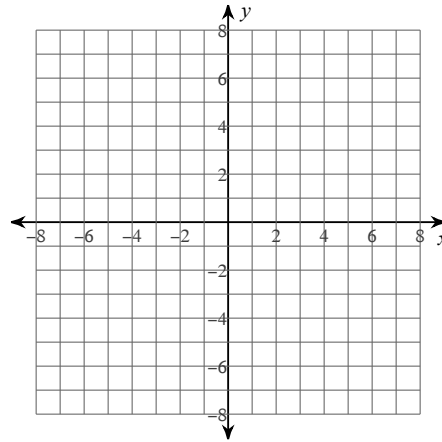
48) $f(x) = x^2 - 6x + 13$



49) $f(x) = -x^2 + 3$



50) $f(x) = -\frac{1}{4}x^2 + 3x - 6$

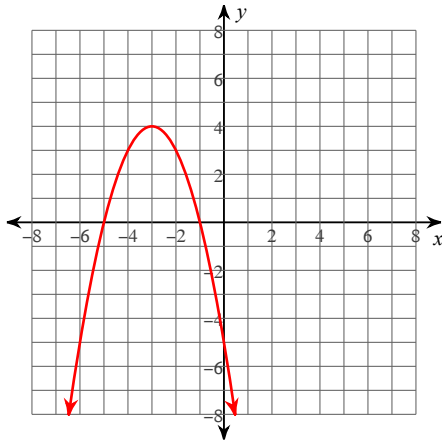


Assignment

Date _____ Period _____

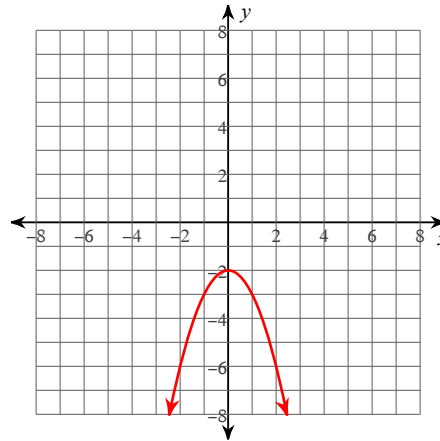
Identify the vertex, axis of symmetry, and y-intercept of each. Then sketch the graph.

1) $f(x) = -x^2 - 6x - 5$



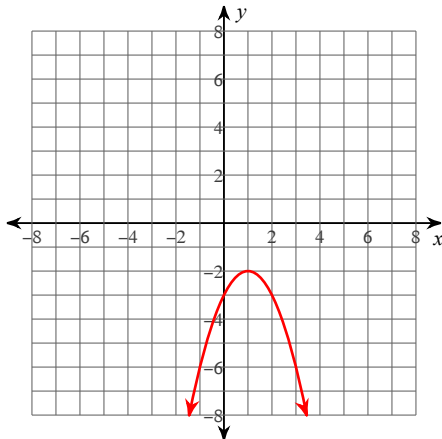
Vertex: $(-3, 4)$
 Axis of Sym.: $x = -3$
 y-int: -5

2) $f(x) = -x^2 - 2$



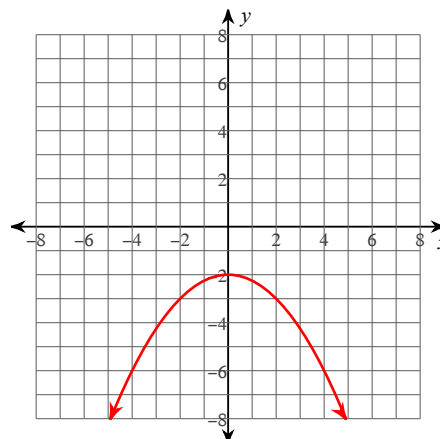
Vertex: $(0, -2)$
 Axis of Sym.: $x = 0$
 y-int: -2

3) $f(x) = -x^2 + 2x - 3$



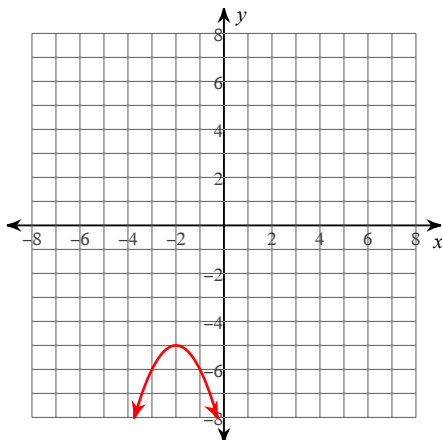
Vertex: $(1, -2)$
 Axis of Sym.: $x = 1$
 y-int: -3

4) $f(x) = -\frac{1}{4}x^2 - 2$



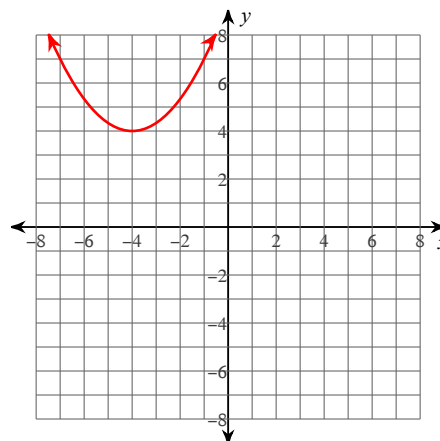
Vertex: $(0, -2)$
 Axis of Sym.: $x = 0$
 y-int: -2

5) $f(x) = -x^2 - 4x - 9$



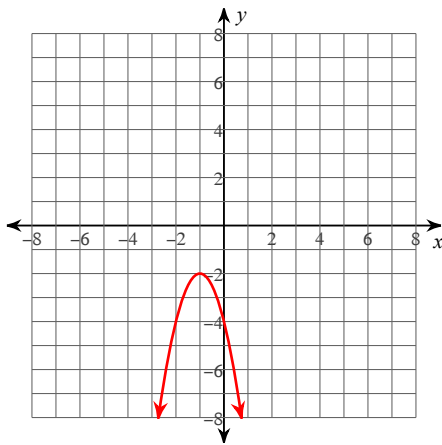
Vertex: $(-2, -5)$
 Axis of Sym.: $x = -2$
 y-int: -9

6) $f(x) = \frac{1}{3}x^2 + \frac{8}{3}x + \frac{28}{3}$



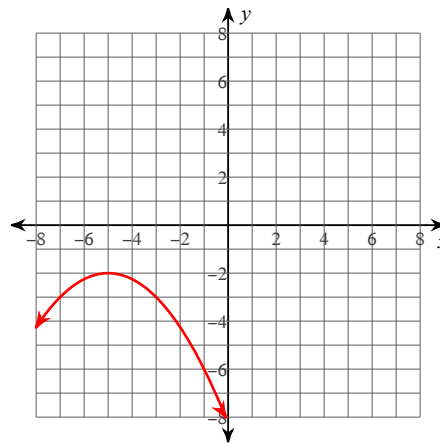
Vertex: $(-4, 4)$
 Axis of Sym.: $x = -4$
 y-int: $\frac{28}{3}$

$$7) f(x) = -2x^2 - 4x - 4$$



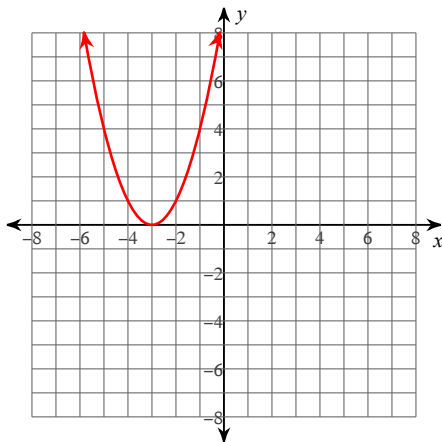
Vertex: $(-1, -2)$
 Axis of Sym.: $x = -1$
 y-int: -4

$$8) f(x) = -\frac{1}{4}x^2 - \frac{5}{2}x - \frac{33}{4}$$



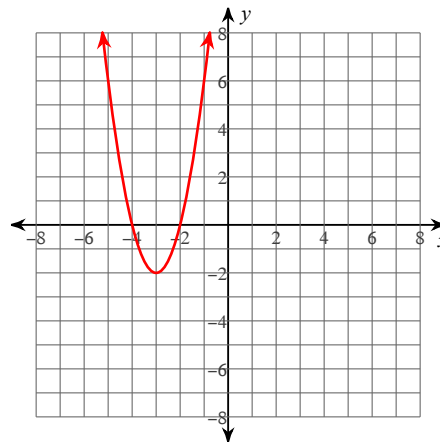
Vertex: $(-5, -2)$
 Axis of Sym.: $x = -5$
 y-int: $-\frac{33}{4}$

$$9) f(x) = x^2 + 6x + 9$$



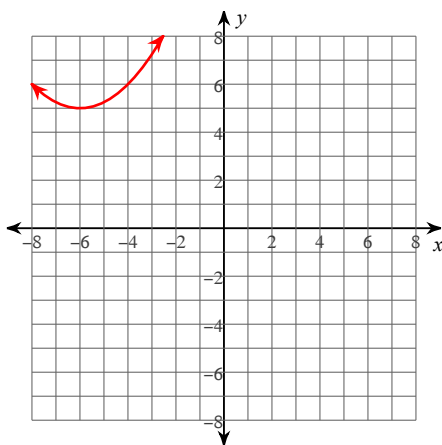
Vertex: $(-3, 0)$
 Axis of Sym.: $x = -3$
 y-int: 9

$$10) f(x) = 2x^2 + 12x + 16$$



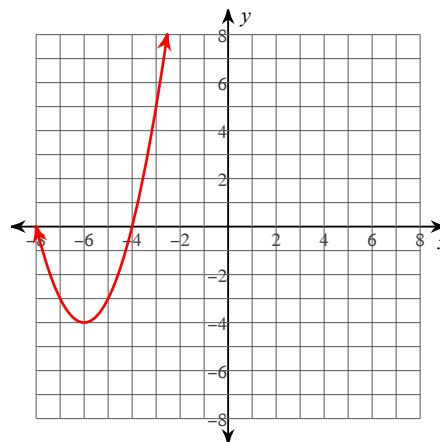
Vertex: $(-3, -2)$
 Axis of Sym.: $x = -3$
 y-int: 16

$$11) f(x) = \frac{1}{4}x^2 + 3x + 14$$



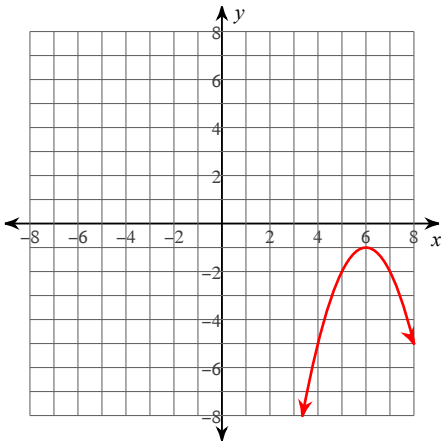
Vertex: $(-6, 5)$
 Axis of Sym.: $x = -6$
 y-int: 14

$$12) f(x) = x^2 + 12x + 32$$



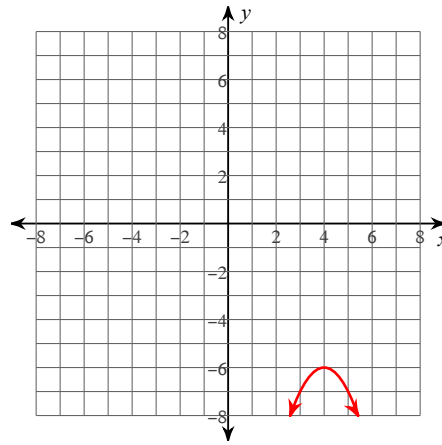
Vertex: $(-6, -4)$
 Axis of Sym.: $x = -6$
 y-int: 32

13) $f(x) = -x^2 + 12x - 37$



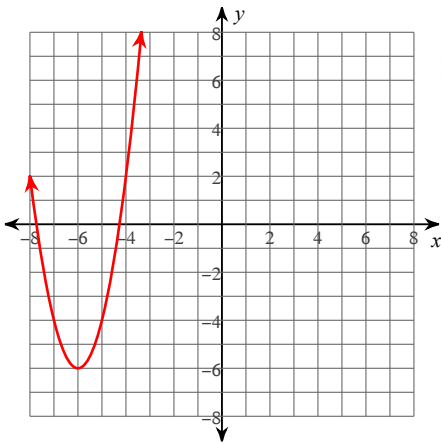
Vertex: (6, -1)
 Axis of Sym.: $x = 6$
 y-int: -37

14) $f(x) = -x^2 + 8x - 22$



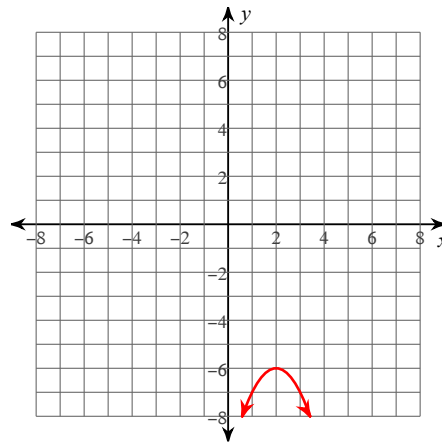
Vertex: (4, -6)
 Axis of Sym.: $x = 4$
 y-int: -22

15) $f(x) = 2x^2 + 24x + 66$



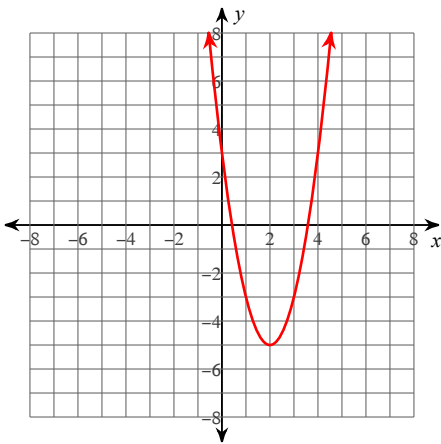
Vertex: (-6, -6)
 Axis of Sym.: $x = -6$
 y-int: 66

16) $f(x) = -x^2 + 4x - 10$



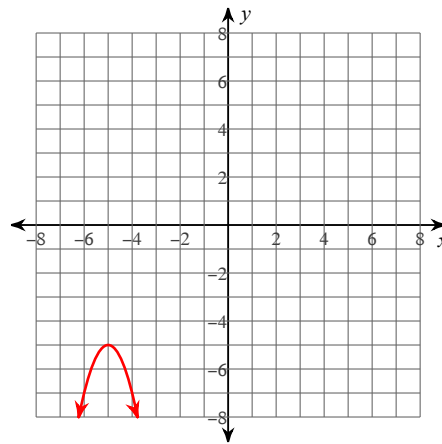
Vertex: (2, -6)
 Axis of Sym.: $x = 2$
 y-int: -10

17) $f(x) = 2x^2 - 8x + 3$



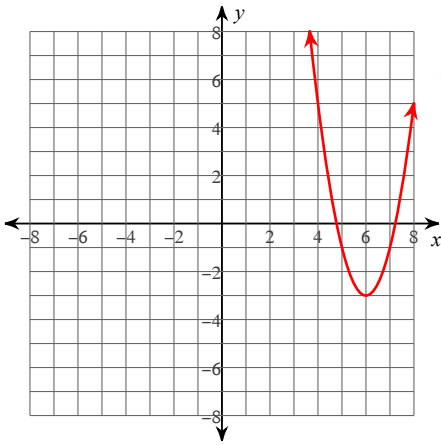
Vertex: (2, -5)
 Axis of Sym.: $x = 2$
 y-int: 3

18) $f(x) = -2x^2 - 20x - 55$



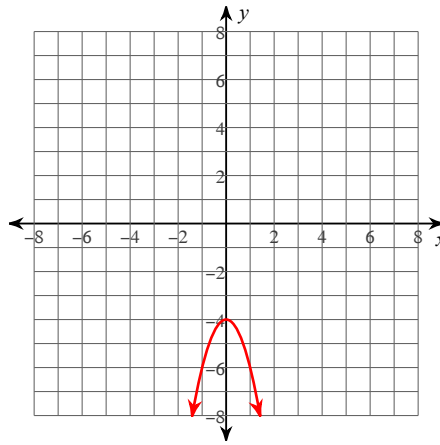
Vertex: (-5, -5)
 Axis of Sym.: $x = -5$
 y-int: -55

19) $f(x) = 2x^2 - 24x + 69$



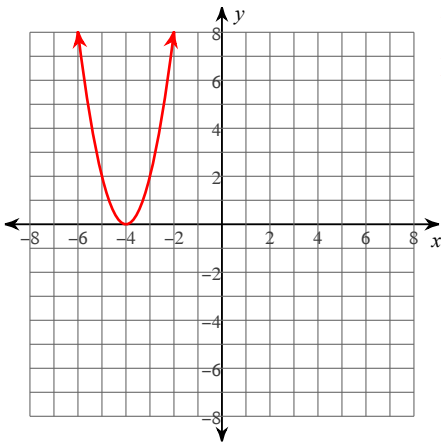
Vertex: (6, -3)
 Axis of Sym.: $x = 6$
 y-int: 69

20) $f(x) = -2x^2 - 4$



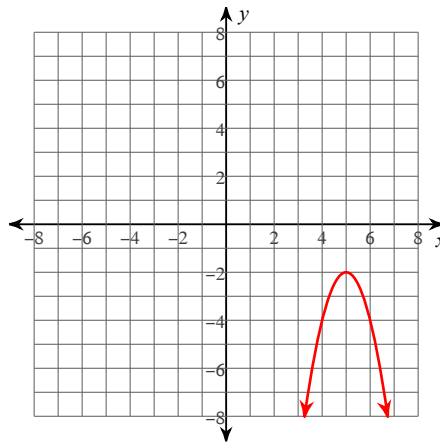
Vertex: (0, -4)
 Axis of Sym.: $x = 0$
 y-int: -4

21) $f(x) = 2x^2 + 16x + 32$



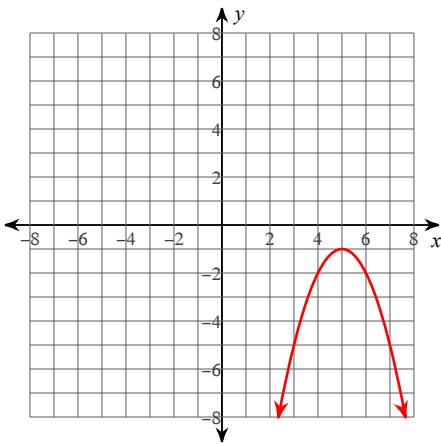
Vertex: (-4, 0)
 Axis of Sym.: $x = -4$
 y-int: 32

22) $f(x) = -2x^2 + 20x - 52$



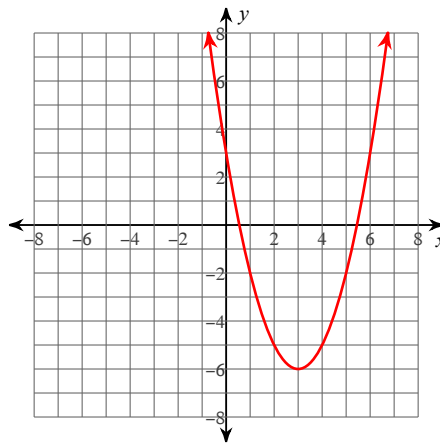
Vertex: (5, -2)
 Axis of Sym.: $x = 5$
 y-int: -52

23) $f(x) = -x^2 + 10x - 26$



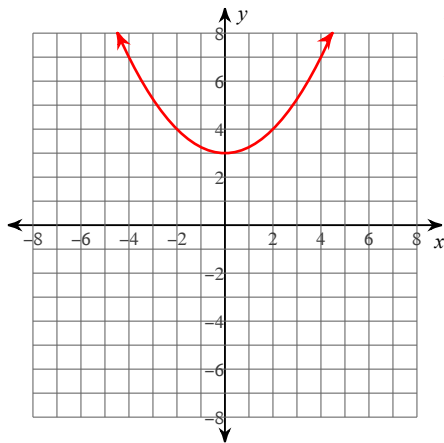
Vertex: (5, -1)
 Axis of Sym.: $x = 5$
 y-int: -26

24) $f(x) = x^2 - 6x + 3$



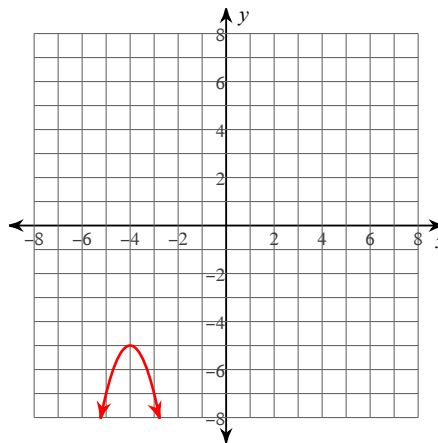
Vertex: (3, -6)
 Axis of Sym.: $x = 3$
 y-int: 3

$$25) f(x) = \frac{1}{4}x^2 + 3$$



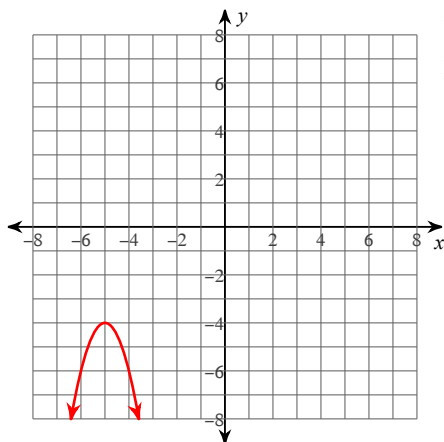
Vertex: (0, 3)
Axis of Sym.: $x = 0$
y-int: 3

$$26) f(x) = -2x^2 - 16x - 37$$



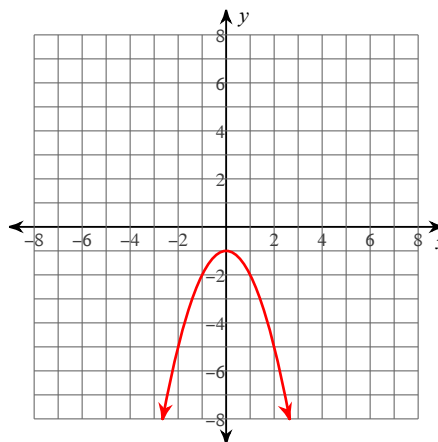
Vertex: (-4, -5)
Axis of Sym.: $x = -4$
y-int: -37

$$27) f(x) = -2x^2 - 20x - 54$$



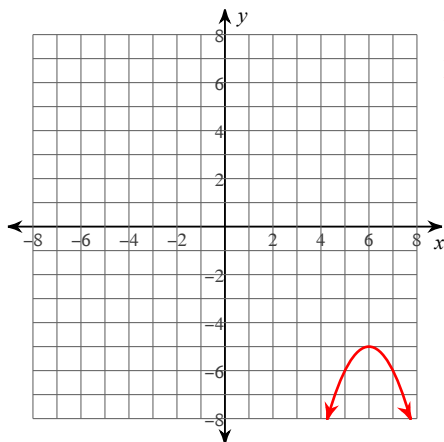
Vertex: (-5, -4)
Axis of Sym.: $x = -5$
y-int: -54

$$28) f(x) = -x^2 - 1$$



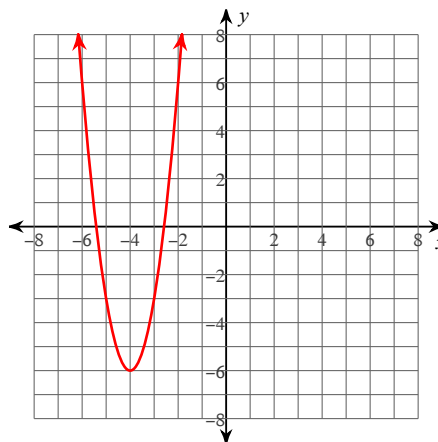
Vertex: (0, -1)
Axis of Sym.: $x = 0$
y-int: -1

$$29) f(x) = -x^2 + 12x - 41$$



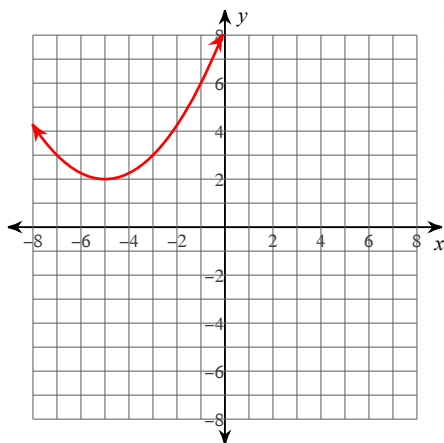
Vertex: (6, -5)
Axis of Sym.: $x = 6$
y-int: -41

$$30) f(x) = 3x^2 + 24x + 42$$



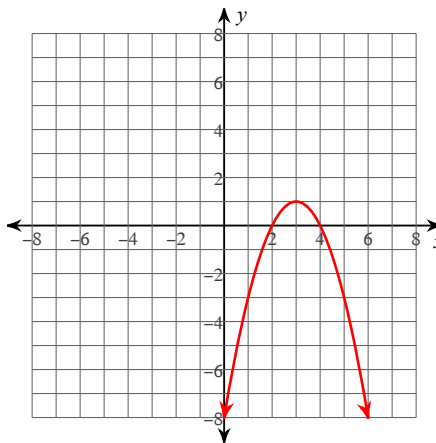
Vertex: (-4, -6)
Axis of Sym.: $x = -4$
y-int: 42

$$31) f(x) = \frac{1}{4}x^2 + \frac{5}{2}x + \frac{33}{4}$$



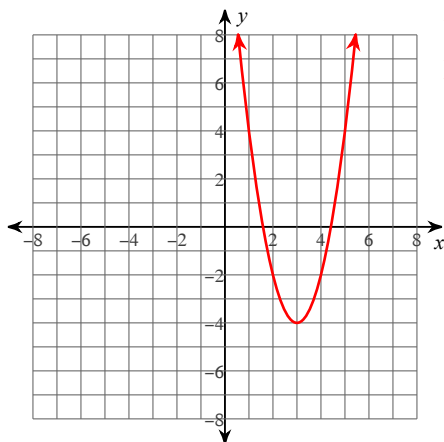
Vertex: $(-5, 2)$
 Axis of Sym.: $x = -5$
 y-int: $\frac{33}{4}$

$$32) f(x) = -x^2 + 6x - 8$$



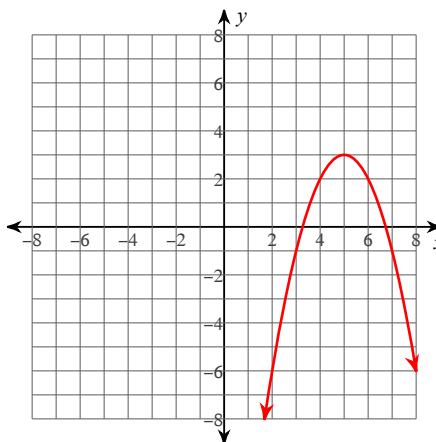
Vertex: $(3, 1)$
 Axis of Sym.: $x = 3$
 y-int: -8

$$33) f(x) = 2x^2 - 12x + 14$$



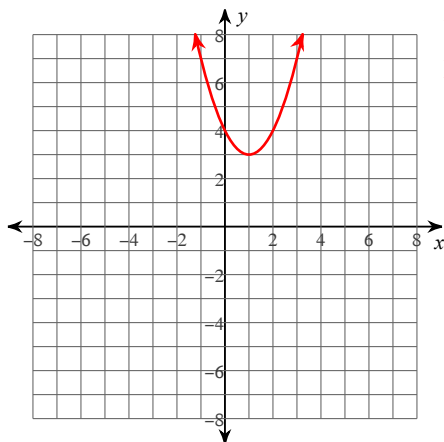
Vertex: $(3, -4)$
 Axis of Sym.: $x = 3$
 y-int: 14

$$34) f(x) = -x^2 + 10x - 22$$



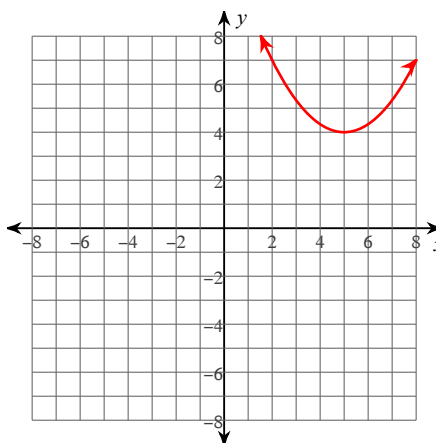
Vertex: $(5, 3)$
 Axis of Sym.: $x = 5$
 y-int: -22

$$35) f(x) = x^2 - 2x + 4$$



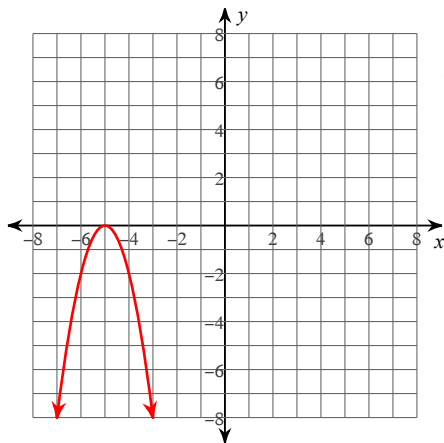
Vertex: $(1, 3)$
 Axis of Sym.: $x = 1$
 y-int: 4

$$36) f(x) = \frac{1}{3}x^2 - \frac{10}{3}x + \frac{37}{3}$$



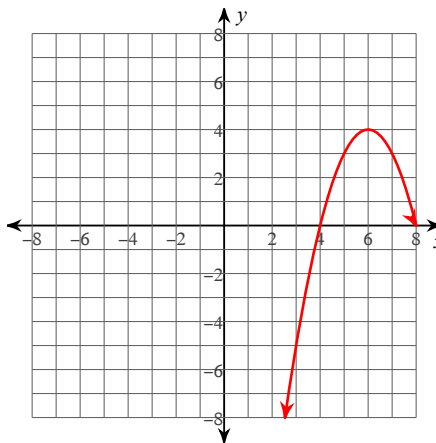
Vertex: $(5, 4)$
 Axis of Sym.: $x = 5$
 y-int: $\frac{37}{3}$

37) $f(x) = -2x^2 - 20x - 50$



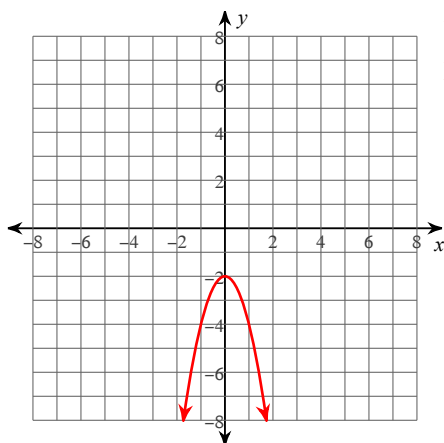
Vertex: $(-5, 0)$
 Axis of Sym.: $x = -5$
 y-int: -50

38) $f(x) = -x^2 + 12x - 32$



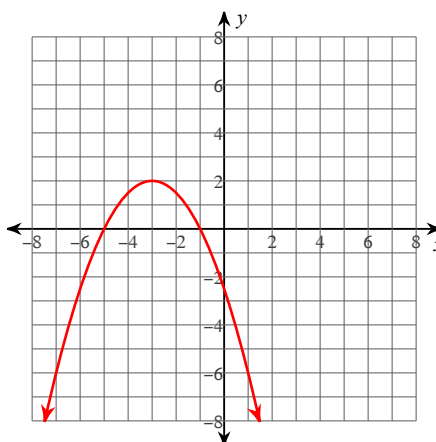
Vertex: $(6, 4)$
 Axis of Sym.: $x = 6$
 y-int: -32

39) $f(x) = -2x^2 - 2$



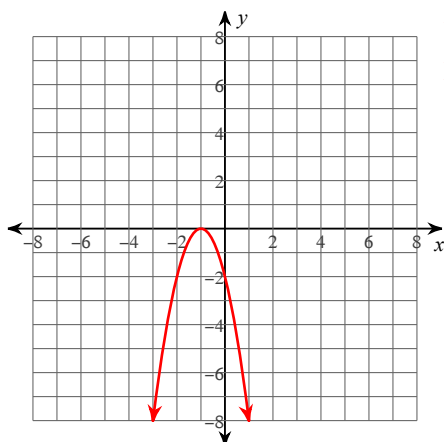
Vertex: $(0, -2)$
 Axis of Sym.: $x = 0$
 y-int: -2

40) $f(x) = -\frac{1}{2}x^2 - 3x - \frac{5}{2}$



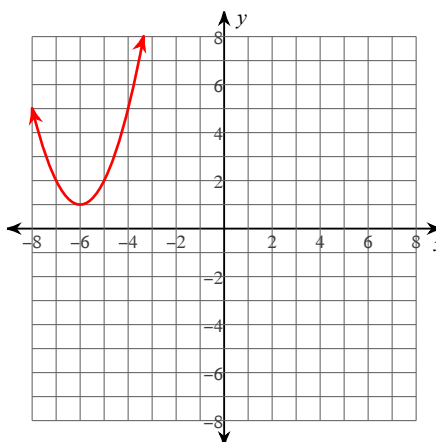
Vertex: $(-3, 2)$
 Axis of Sym.: $x = -3$
 y-int: $-\frac{5}{2}$

41) $f(x) = -2x^2 - 4x - 2$



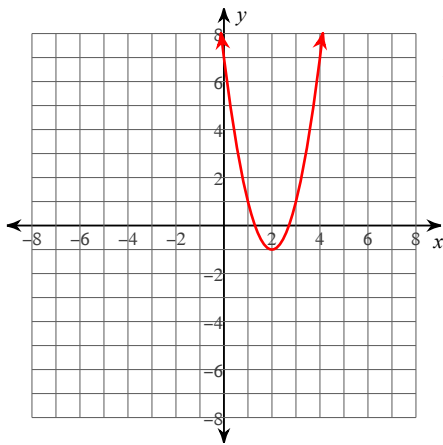
Vertex: $(-1, 0)$
 Axis of Sym.: $x = -1$
 y-int: -2

42) $f(x) = x^2 + 12x + 37$



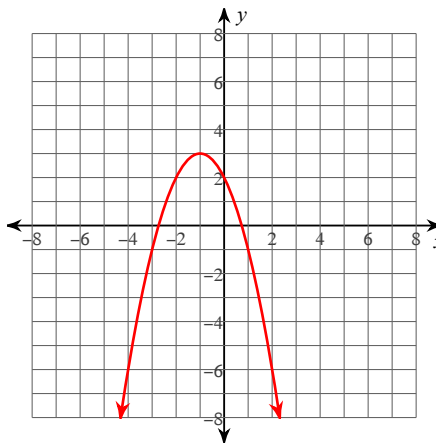
Vertex: $(-6, 1)$
 Axis of Sym.: $x = -6$
 y-int: 37

43) $f(x) = 2x^2 - 8x + 7$



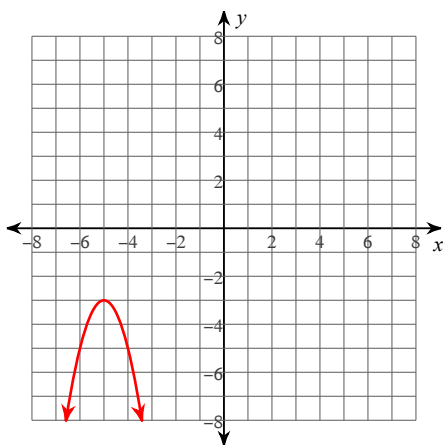
Vertex: (2, -1)
Axis of Sym.: $x = 2$
y-int: 7

44) $f(x) = -x^2 - 2x + 2$



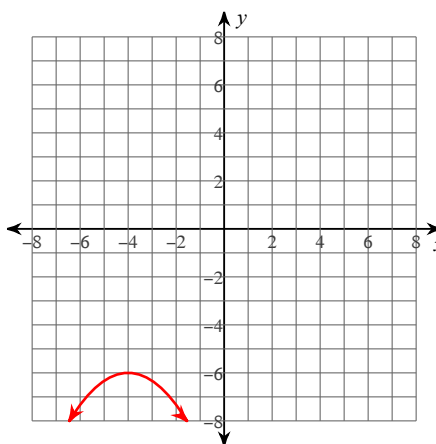
Vertex: (-1, 3)
Axis of Sym.: $x = -1$
y-int: 2

45) $f(x) = -2x^2 - 20x - 53$



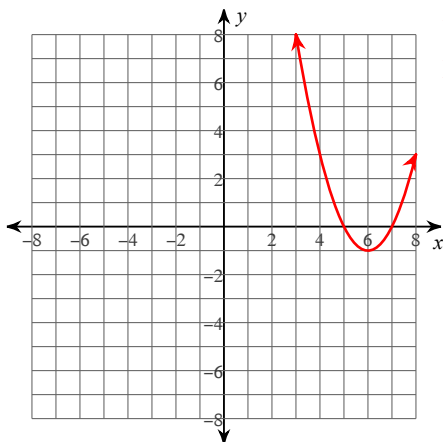
Vertex: (-5, -3)
Axis of Sym.: $x = -5$
y-int: -53

46) $f(x) = -\frac{1}{3}x^2 - \frac{8}{3}x - \frac{34}{3}$



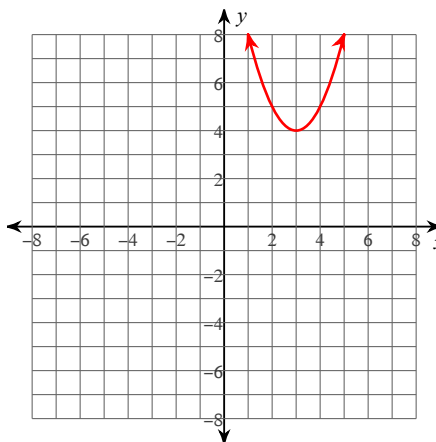
Vertex: (-4, -6)
Axis of Sym.: $x = -4$
y-int: $-\frac{34}{3}$

47) $f(x) = x^2 - 12x + 35$



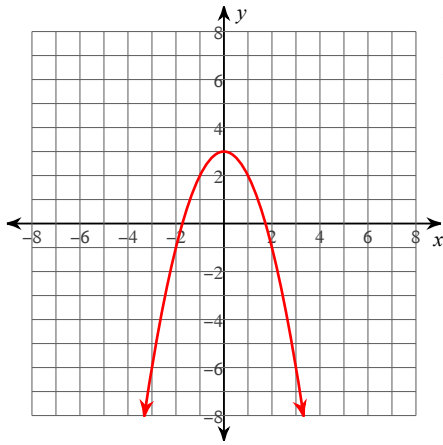
Vertex: (6, -1)
Axis of Sym.: $x = 6$
y-int: 35

48) $f(x) = x^2 - 6x + 13$



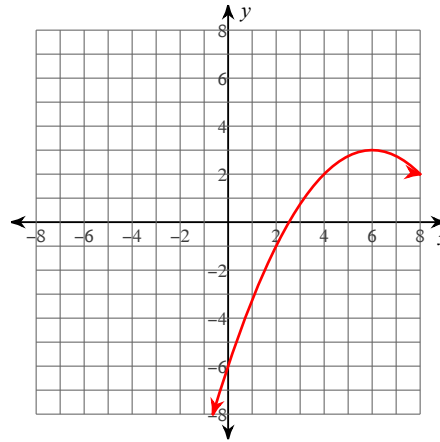
Vertex: (3, 4)
Axis of Sym.: $x = 3$
y-int: 13

49) $f(x) = -x^2 + 3$



Vertex: (0, 3)
Axis of Sym.: $x = 0$
y-int: 3

50) $f(x) = -\frac{1}{4}x^2 + 3x - 6$



Vertex: (6, 3)
Axis of Sym.: $x = 6$
y-int: -6