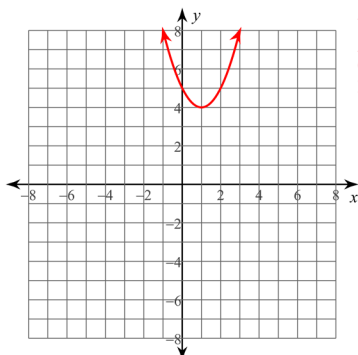


2.1 Homework

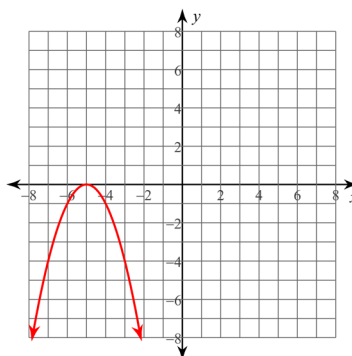
Odd Answers

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



Vertex: (1, 4)
Axis of Sym.: $x = 1$
Opens: Up
Min value = 4

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



Vertex: (-5, 0)
Axis of Sym.: $x = -5$
Opens: Down
Max value = 0

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

Vertex: (9, -5)

Axis of Symmetry: $x = 9$

Minimum Value: -5

7. $y = -(x-5)^2 + 4$

Vertex: (5, 4)

Axis of Symmetry: $x = 5$

Maximum Value: 4

9. $y = 2(x-6)^2 + 10$

Vertex: (6, 10)

Axis of Symmetry: $x = 6$

Minimum Value: 10

11. $f(x) = \frac{1}{2}(x-8)^2 + 5$

Vertex: (8, 5)

Axis of Symmetry: $x = 8$

Minimum Value: 5

13. Vertex: (-9, 7), Opens down, Maximum value = 7

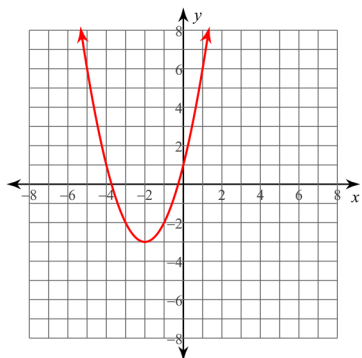
15. Vertex: (4, -5), Opens up, Minimum value = -5

17. y-int: 18, x-ints: -6 & -3

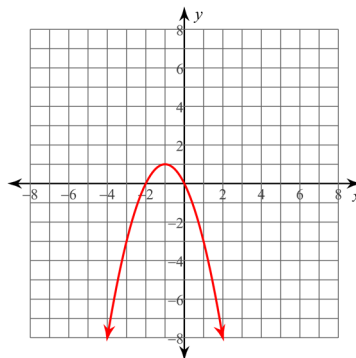
19. y-int: -3, x-ints: 1 & -3/2

21. y-int: 6, x-ints: $\frac{5 \pm \sqrt{31}}{2}$

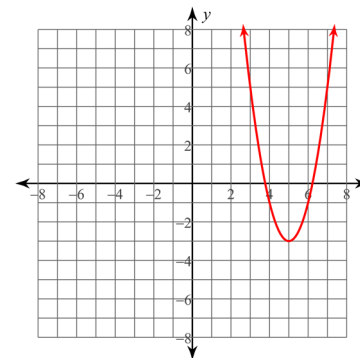
23. $f(x) = x^2 + 4x + 1$



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



27. $f(x) = 2x^2 - 20x + 47$



29. $f(x) = -3(x+5)^2$

31. $f(x) = (x+3)^2 + 3$