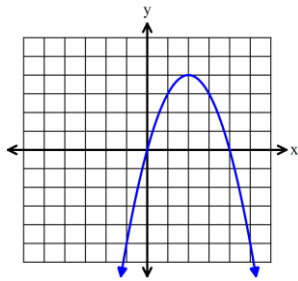
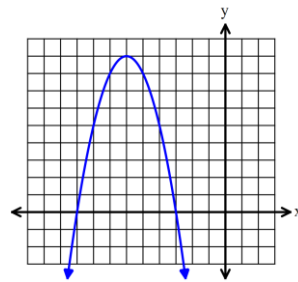


Practice Test Key Alg 2 Unit 4

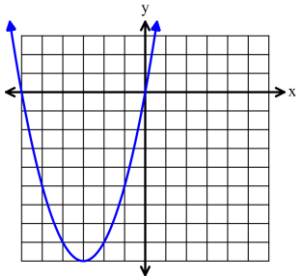
1. Vertex: (2, 4)
 Axis: $x = 2$
 x-int: 0, 4
 y-int: (0,0)
 Max @ 4
 D: $(-\infty, \infty)$
 R: $(-\infty, 4]$



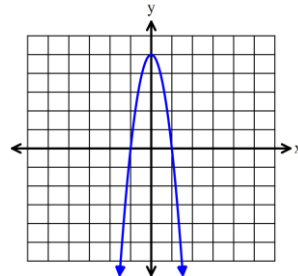
2. Vertex: (-6, 9)
 Axis: $x = -6$
 x-int: $x = -9, -3$
 y-int: (0,-27)
 Max @ 9
 D: $(-\infty, \infty)$
 R: $(-\infty, 9]$



3. Vertex: (-3, -9)
 Axis: $x = -3$
 x-int: 0, -6
 y-int: (0,0)
 Min @ -9
 D: $(-\infty, \infty)$
 R: $[-9, \infty)$



4. Vertex: (0, 5)
 Axis: $x = 0$
 x-int: -1, 1
 y-int: (0, 5)
 Max @ 5
 D: $(-\infty, \infty)$
 R: $(-\infty, 5]$



5. $y = (x - 1)^2 - 9$

Vertex: (1,-9) Axis: $x=1$

D: $(-\infty, \infty)$ Zeros: 4&-2

R: $[-9, \infty)$

6. $y = 3(x + 2)^2 - 21$

Vertex: (-2, -21) Axis: $x=-2$

D: $(-\infty, \infty)$ Zeros: $-2+\sqrt{7}$

R: $[-21, \infty)$

7. $y = (x + 5)^2 - 29$

Vertex: (-5, -29) Axis: $x=-5$

D: $(-\infty, \infty)$ Zeros: $-5+\sqrt{29}$

R: $[-29, \infty)$

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

Vertex: (-7,-4) Axis: $x=-7$

D: $(-\infty, \infty)$ Zeros: $-7\pm 2i$

R: $(-\infty, -4]$

9. 41 feet

10. A

11. Up, Min@ -2

12. C

13. $a = -\frac{2}{5}$

14. $f(x) = \frac{1}{2}(x - 5)^2 + 6$

15. Reflected, stretched, left two, down 3

16. (0, -11)

17. $a = -4$

18. $k = 5$

19. $h = 7$

20a) 81 ft

b) 18 ft