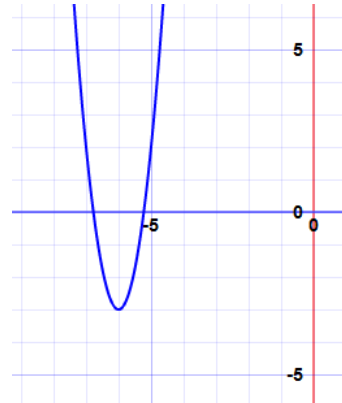


Unit 2 Quiz 2 Review Sheet – ANSWER KEY

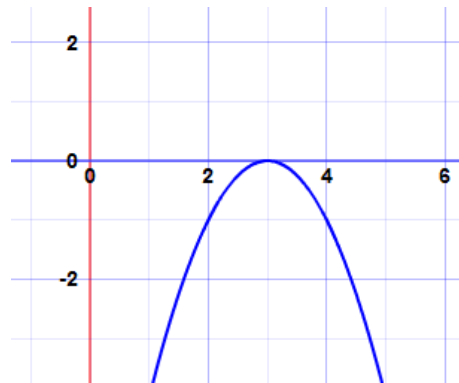
1. Transformations: narrow by 5, shift left 6, shift down 3
Vertex: (-6, -3)
x-intercepts: 2 real roots



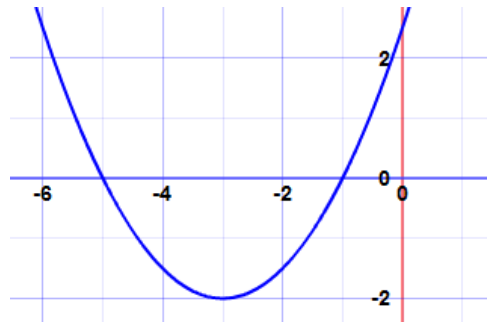
2. Vertex: (2, 32)
x-intercepts: 2 real roots
Vertex Form: $y = -2(x - 2)^2 + 32$
Transformations: reflect x-axis, narrow by 2, shift right 2, up 32



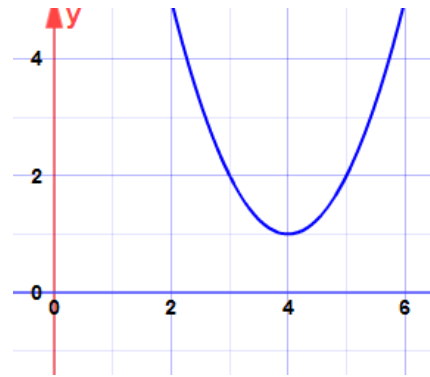
3. Vertex: (3, 0)
x-intercepts: double root
Vertex Form: $y = -(x - 3)^2$
Transformations: reflect x-axis, shift right 3



4. Transformations: wide by $\frac{1}{2}$, shift left 3, shift down 2
Vertex: (-3, -2)
x-intercepts: 2 real roots



5. Transformations: shift right 4, shift up 1
Vertex: (4, 1)
x-intercepts: 2 imaginary roots



6. $-8, 12$

7. $-2 \pm \sqrt{7}$

8. $-2 \pm \sqrt{10}$

9. $\pm 5\sqrt{2}$

10. -1

11. $-8, 2$

12. $4 \pm i\sqrt{3}$

13. $\frac{-2 \pm \sqrt{14}}{2}$

14. -3

15. $-\frac{5}{2}, 3$

16. $-2, 5$

17. ± 1

18. -2

19. $-3, 0$

20. $-\frac{3}{2}, -\frac{1}{3}$

21. $-2 \pm \frac{\sqrt{66}}{3}$

22. $-3, 9$

23. $\pm 2\sqrt{3}$

24. Transformations: reflect x-axis, shift right 1, shift up 3

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

25. Transformations: shift left 2, shift down 4

Equation: $y = (x + 2)^2 - 4$

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

27. $y = (x - 1)^2 - 2$

28. $y = x^2 + 4x - 5$

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

30. $y = 2x^2 + 13x - 7$