

**Algebra 2 First Semester Exam
Review Answers**

Chapter 1

Page 8 # 2, 3, 4, 20, 21

2. Irrational and real

3. irrational and real

4. integers, rational and real

20. $<$ (is less than)

21. $<$ (is less than)

Page 9 # 79, 80

79. $<$ (is less than)

80. $<$ (is less than)

Page 15 # 5, 6, 31, 32

5. -16

6. 28

31. $10y + x = 4$

32. $-y - 6x$

Page 16 # 38, 39

38. 5

39. 17

Page 21 # 5, 9, 14, 40

5. 3.5 or 7/2

9. 8

14. -6

40. 30

Page 29 # 5, 9, 19

5. $y < -14$

9. $n > 8$

19. $-4 < x < 2$

Page 36 #14

14. $-1, 3/2$

Page 37 # 34, 40

34. no solution

40. $11/8$ (remember to check both answers)

Chapter 2

Page 59

13. function

14. function

16. function

19. function

20. not a function

23. 13, 7, -3.5, -14

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5. graph on calculator to check

11. -1

17. undefined

18. 0

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21. $(5/6)x - y = 19/3$

25. $5x - y = -2$

27. $y - 0 = (5/4)(x - 1)$

29. $y + 1 = (-4/3)(x - 0)$

33. $3/2$

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5. yes, $k = 7$, $y = 7x$

6. no

15. yes, $k = 6$

Page 75

43. 90

Page 81

1. $d = 62.5h + 15$

7. $1.75x + 1.75, \$8.40$

Page 89 Use the formula to figure the vertex!

40. graph on calculator to check

42. graph on calculator to check

43. graph on calculator to check

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9. $y = x - (2/3)2$

11. $y = -1x + 1 + 2$

16. $y = 1x + 21$

17. $y = 1x - 31$

18. $y = -1x - 41$

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23. graph on calculator to check

26. graph on calculator to check

38. $x > -3$

39. $y < (3/2)x + 2$

42. $y < -1x - 41$