

**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

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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, $k = 6$

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43. 90

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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. $y = x - (2/3)$
11. $y = -1x + 2$
16. $y = 1x + 2$
17. $y = 1x - 3$
18. $y = -1x - 4$

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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. $y < -1x - 4$