

Algebra A-B
Review for Final Exam

ANSWER KEY

1. $\frac{16}{24} = 66\frac{2}{3}\%$	26. $x = -\frac{1}{2}$
2. $.32x = 144$ $x = 450$	27. $(63^\circ + 68^\circ + 74^\circ + 83^\circ + 87^\circ + 85^\circ + 88^\circ) \div 7 \approx 78^\circ$
3. $\frac{483 - 420}{420} = .15 = 15\%$	28. $x^\circ + (4x + 15^\circ) + (3x + 25^\circ) = 180^\circ$ $x = 17.5^\circ$ $m\angle C = 3(17.5^\circ) + 25^\circ = 77.5^\circ$
4. $\frac{36 \text{ mi}}{1 \text{ gal}} \times 15 \text{ gal} = 540 \text{ mi}$	29. $1 - \frac{5}{12} = \frac{7}{12}$
5. $a_n = a_{n-1} + a_{n-2}$: = 21, 34, 55	30. $-\frac{ (-18) + (-2) }{7 + (-2)} = -\frac{ -20 }{5} = -\frac{20}{5} = -4$
6. $\frac{-3(10-5)+3}{6^2-3\cdot 5} = \frac{-12}{21} = -\frac{4}{7}$	31. $y = \frac{c-3a}{4}$
7. $(6)(18+ -6) = 72$	32. $x < 4$
8. $14x - 3xy^2$	33. $x > -\frac{2}{3}$
9. $10a + 15c$	34. $x < 2$
10. a) Associative Prop b) Commutative Prop c) Additive Inverse d) Additive Identity	35. $-2 \leq x < 1$
11. -1.58	36. Quadrant II
12. $-7\frac{7}{8}$	37. (5, 1)
13. $\frac{3\sqrt{2}}{5\sqrt{2}} = \frac{3}{5}$	38. $y = -\frac{2}{5}(-10) + 2 = 6$ (-10, 6)
14. $2(16) + 3(-4) - 1 = 19$	39. Range = { 5, 12, 22 }
15. $\frac{3x(3y-5)}{3x} = 3y-5$	40. $g(3) = (3)^2 - 4 = 5$
16. $2x^2 + 5$	41. The functions are a, b, and d
17. $3x + 2 = 35$ $x = 11$ Paul has 11 CD's	42. slope = $\frac{3-0}{0-2} = -\frac{3}{2}$
18. $d = 2n$, $n = q - 8$, $n + d + q = 44$ $(n) + (2n) + (n + 8) = 44$ $n = 9$, $d = 18$, $q = 17$ 9 nickels, 18 dimes and 17 quarters	43. slope = $\frac{12 - (-4)}{5 - (-3)} = \frac{16}{8} = 2$
19. $x = 8$	44. $m = \frac{2}{3}$ $y - 2 = \frac{2}{3}(x - 3)$ $y = \frac{2}{3}x$
20. $x = 60$	45. $h(-3) = 3(-3) - 7 = -16$
21. $x = 6$	46. $m = 1$ $y + 5 = 1(x - 3)$ $y = x - 8$
22. $w = 5$	47. Given: $m = 2$ with P (0, -1) $y + 1 = 2(x - 0)$ $y = 2x - 1$
23. $x = 2$	48. slope = 0 \Rightarrow horizontal line
24. $x = 4$	49. $y = -2x + 12$
25. $t = 4$	50. $3x - 4y = -20$