



## Fundamentals of Algebra Sample Final Exam Answers

1. A)  $x = -2$
2.  $82^\circ$
3.  $y^2 + 3y + 7$
4. 300 mph, 335 mph
5. B)  $w = \frac{V}{lh}$
6.  $\frac{-77}{12}$
7. C)  $\frac{3x^2 + 4x - 8}{x^2 - 4}$
8. C)  $x^2 + 12xy + 36y^2$
9.  $6x^4y^3$
10.  $2(x - 6)(x - 2)$
11. \$17
12. C) Undefined
13. B)  $10x^2 - 6x + 7$
14. C)  $v = 2$
15.  $(3x + 1)(x + 4)$
16. C)  $x = \frac{1}{25}$
17.  $2x - 1 + \frac{7}{4x}$
18.  $x - 2$
19. D)  $w = -3.3$
20. C)  $4x^3 - 4x^2 - 16x - 8$
21. A)  $\frac{11}{18}$
22. A)  $\frac{-7x - 5}{x - 6}$
23. A)  $\frac{1}{9}$
24. \$28,500 at 8%, \$11,500 at 7%
25.  $z \geq 3$  
26. \$52,371
27.  $\frac{8}{15}$
28.  $(x + 6)(x + 7)$
29. -116, -115, -114
30.  $(4y + x)(16y^2 - 4xy + x^2)$
31.  $\frac{3}{2x}$
32. C)  $125x^3y^3$
33. All Real Numbers
34. A)  $\frac{3a^2}{4b^3}$
35.  $(a + y)(r + u)$
36.  $v = -2$
37. B) 40
38.  $\frac{z - 6}{z + 8}$
39. D)  $\frac{1}{x^5}$
40. C)  $6x^2 + 2x - 4$
41. C)  $\frac{-8}{63}$
42. D) -12
43. D) 59
44.  $-6 \leq x \leq -2$
45.  $z \leq 3$  
46. \$6.49
47. -17
48.  $\frac{x(2x + 3)}{2x^2 - 5}$  or  $\frac{2x^2 + 3x}{2x^2 - 5}$
49.  $-3x - 3y - 12$
50. C)  $-2x(y^2 + 3x + 2)$
51.  $(5x + 2)(5x - 2)$
52. 13