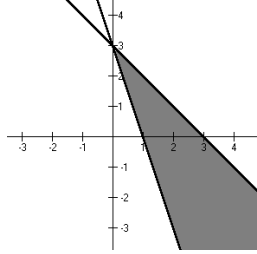
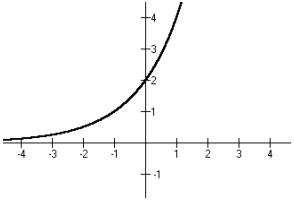
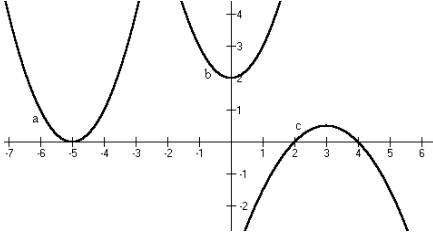


**Intermediate Algebra 1-2  
Review for Final Exam**

**ANSWER KEY**

1. $t = \frac{A - P}{Pr}$	26. $4\sqrt{3}$
2. $x = 30$	27. a) $4 - 25i^2 = 29$ b) $4 - 3i$
3. constant = $\frac{25}{12}$	28. $\sqrt{50} = 5\sqrt{2}$
4. $a = 7$ or $a = -12$	29. $y = -\frac{2}{3}x + 2$
5. $x \leq -1$ or $x > 2$	30. 
6. $\frac{5}{34}$	
7. $(8 - 1)! = 5040$	
8. 56	
9. $18x^3y^3 - 12x^3y^2 + 6x^4y^5$	
10. $x^3 - 2x^2 + x - 6$	31. $y = -\frac{1}{2}x - 7$
11. $\frac{15}{4}$	32. $\frac{20y^3}{3}$
12. $\frac{7c - 2}{3c}$	33. 216
13. $a(3x + 5)(2x - 3)$	34. $\log_2 16 = 4$
14. $(x^2 + 9)(x + 3)(x - 3)$	35. $x = 81$
15. $k = 9$	36. $f(x) = (2)^{-x}$
16. Graphs a, c and d are functions	37. $x \approx 3.262$
17. $f^{-1}(x) = \frac{8}{5}(x + 6)$	38. $\log_5(8^3 \times 9 \div \sqrt{3}) = \log_5 \frac{4608}{\sqrt{3}} = \log_5 1536\sqrt{3}$
18. $x \geq -2$	39. $t_8 = 8! + 2^8 = 40,576$
19. $f[g(x)] = 2(4x - 2) + 5 = 8x + 1$	40. 3,896,000
20. 	41. \$9,908.94
21. No solution	42. 610
22. $x = 7$	43. $60x^2y^4$
23. $x = -\frac{5}{3}$ or $x = 4$	44. $\begin{vmatrix} \frac{3}{2} & -\frac{5}{2} \\ -1 & 2 \end{vmatrix} = \frac{1}{2} \begin{vmatrix} 3 & -5 \\ -2 & 4 \end{vmatrix}$
24. 	45. a) $\begin{bmatrix} 2 & -1 \\ 1 & 2.5 \end{bmatrix}$ b) $\begin{bmatrix} -19 & 4 \\ 5 & 0 \end{bmatrix}$ c) $\begin{bmatrix} -3 & 1 \\ 2 & \frac{1}{2} \end{bmatrix} \cdot \frac{1}{8} \begin{bmatrix} 2 & 2 \\ 1 & 5 \end{bmatrix} = \frac{1}{8} \begin{bmatrix} -5 & -1 \\ 4.5 & 6.5 \end{bmatrix}$
25. a) Domain: $x \geq 1$ Range: $y =$ all real numbers b) Domain: $x \neq -1$ Range: $y > 1$ or $y < 1$ c) Domain: $-3 \leq x \leq 1$ Range: $0 \leq x \leq 2$	46. $\frac{x^2}{9} - \frac{y^2}{4} = 1$
	47. $\frac{x^2}{4} + \frac{y^2}{9} = 1$
	48. Parabola, only one squared term
	49. $x = 1.5, y = -7.5$ or $x = 4, y = 0$
	50. vertex at $(1, -1)$

