**Page 427 #10-23, 37 – 42 answers**

10. $y = \frac{1}{2}(2)^x$

11. $y = 2.5(7)^x$

12. $y = 8(1.5)^x$

13. $y = 5(0.6)^x$

14. $y = 3\left(\frac{1}{2}\right)^x$

15. $y = 24\left(\frac{1}{3}\right)^x$

16. exponential growth

17. exponential decay

18. exponential growth

19. exponential decay

20. exponential decay

21. exponential growth

22. exponential growth

23. exponential decay

37. 63% increase

38. 30% increase

39. 35% decrease

40. 70% increase

41. 87.5% decrease

42. 75% decrease