Page 426 #9, 35, 36, 45, 54, 59 answers

- 9. a) 1.0126
- b) $y = 6.08(1.0126)^x$ where y is total world population and x is the number of years AFTER 2000.
- 35. a) $y = 6500(0.857)^x$ where y is value of the computer and x is the number of years

36. a)

b) Yes. Tokyo, Bombay, São Paulo, Mexico City

City	Projected
	Population
Tokyo	26,444,000
Mexico City	18,850,649
Bombay	23,148,579
São Paulo	19,496,367

- 45. a) $y = 80(0.965)^x$ where y is the total number of animals and x is the number of years.
- 54. a) $y = 34(1.26)^x$ where y is number of cell phone users (in millions) and x is the number of years AFTER 1999.
- 59. a) A negative growth rate basically means a decay rate. It is represented by (1 rate of decay).
 - b) For each equation below, y is the BDP (in billions) and x is the number of years AFTER 1998.

Country	GDP Model
Armenia	$y = 9.2(1.06)^x$
Canada	$y = 688.3(1.03)^x$
Oman	$y = 18.6(0.915)^x$
Paraguay	$y = 19.8(0.995)^x$

c)

Country	Projected GDP
Armenia	\$13.8 billion
Canada	\$846.5 billion
Oman	\$10.0 billion
Paraguay	\$19.1 billion