- 1.  $365 \times 24 \times 60 = 525600$
- 2. I will have \$1,009.98.
- 3. With a CD at two banks she'll withdraw \$2,354.38. With a CD only at the first bank she'll withdraw \$2,323.23.
- 4. I should save \$2,582.61.
- 5. Michael will be 30.8 years old.
- 6. Their interest rate is 8.28%.

	Plan	Р
	Annually	\$821.92710676
	Semiannually	\$820.34829988
	Quarterly	\$819.54447034
	Monthly	\$819.00310366
7.	Weekly	\$818.79370251
	Daily	\$818.73972486
	Hourly	\$818.73112693
	Every Minute	\$818.73075931
	Every second	\$818.73075318
	Continuously	\$818.73075308

8. (a) 
$$k = \frac{1}{2} \ln \frac{52}{35} \approx 0.1979$$

(b) There are about 9,417 bacteria after 5 hours.

(c) After about 5.303 hours the population will reach 10,000.

9. (a) 
$$k = \frac{1}{8} \ln \frac{1}{2} \approx -0.0866$$

- (b) About 2.973 grams will remain after 6 days.
- (c) It will take about 18.57 days until 1 gram is left.