

# Exponential Growth and Decay

1. a) 28,500

b)  $P(t) = 30,000(0.95)^t$

c) 20,950

d) 33,241

e) 13.5 years

8 a) \$20,828.90

b) \$20,350.70

c) \$14,204.60, \$13,702.30

2 a)  $P(t) = 10,000(1.3)^t$

b) 32,565

c) 6,318

d) 2.64 hours

9. 8.78%

3. a) 34,641

b) 2:38 pm

4. a) 40,000

b) 4:39 pm

5 a) \$18,194

b) about 11.6 yrs

c) \$783.61

6. a) about 27.6 yrs

7 a) \$583.61, \$870.07

b) 4.074%