

Math 105 - Finite Mathematics - J-term 2017

Quiz 3

January 9, 2017

Name: _____

Problem 1. What is the future value of \$100 invested for 4 years at 6% interest compounded (a) annually, (b) quarterly, (c) monthly?

$$\textcircled{a} A = \$100 \left(1 + \frac{0.06}{1}\right)^4 = \$126.25$$

$$\textcircled{b} A = \$100 \left(1 + \frac{0.06}{4}\right)^{16} = \$126.90$$

$$\textcircled{c} A = \$100 \left(1 + \frac{0.06}{12}\right)^{48} = \$127.05$$

Problem 2. In a suburb, housing costs have been increasing at 5.2% per year compounded annually for the past 8 years. A house worth \$260,000 now would have had what value 8 years ago?

$$\$260,000 = P \left(1 + \frac{0.052}{1}\right)^8$$

$$P = \$173,319.50$$