

Math 112 - Quiz 10

October 17, 2018

Name key

Score _____

Show all work to receive full credit. Supply explanations when necessary. This quiz is worth 5 points. YOU MUST WORK INDIVIDUALLY.

1. (2 points) \$1975 is deposited into an account earning 7.2% simple interest. How much is the account worth after $3\frac{1}{2}$ years?

$$I = (1975)(0.072)(3.5) = \$497.70$$

$$A = 1975 + 497.70 = \$2472.70$$

2. (2 points) Jane borrowed \$8000 and paid off the loan 6 years later. The interest she ended up paying was \$4046.40. What was her simple interest rate? (Write your answer as a percent.)

$$4046.40 = (8000)(r)(6)$$

$$4046.40 = 48000r$$

$$r = \frac{4046.40}{48000} = 0.0843$$

8.43%

3. (1 point) If interest is compounded weekly, how many compounding periods are there per year?

52 weeks per year