Math 099 - Assignment 7

October 15, 2018

Name __key__

Score _____

Show all work to receive full credit. Supply explanations when necessary. This assignment is worth 5 points.

1. Use your calculator to evaluate each expression at the given values.

   (a) $P \cdot \left(1 + \frac{r}{n}\right)^{60}$ when $P = 1500.75$, $r = 4.55\%$, and $n = 5$

   $$1500.75 * \left(1 + 0.0455/5\right)^{\wedge} 60$$

   $$\approx 2584.405892$$

   (b) $P \cdot \left(1 + \frac{r}{n}\right)^{nt}$ when $P = 535.50$, $r = 2.75\%$, $n = 4$, and $t = 10$

   $$535.50 * \left(1 + 0.0275/4\right)^{\wedge} (4 * 10)$$

   $$\approx 704.3390799$$

   (c) $R \cdot \left[\left(1 + \frac{r}{n}\right)^{nt} - 1\right]$ when $R = 250$, $r = 7.5\%$, $n = 12$, and $t = 25$

   $$250 * \left(\left(1 + 0.075/12\right)^{\wedge} (12 * 25) - 1\right)$$

   $$\approx 1370.720112$$

   (d) $R \cdot \left[1 - \left(1 + \frac{r}{n}\right)^{-nt}\right]$ when $R = 1000$, $r = 8.25\%$, $n = 12$, and $t = 15$

   $$1000 * \left(1 - \left(1 + 0.0825/12\right)^{\wedge} (-12 * 15)\right)$$

   $$\approx 708.6603443$$

2. Round each number to the indicated place.

(a) 123.4556 to the nearest hundredth

123.46

(b) 0.000825 to the nearest thousandth

0.001

(c) 0.468 to the nearest one

0

(d) 145459.82 to the nearest thousand

145,000.00

(e) 145459.82 to the nearest ten thousand

150,000