Math 099 - Quiz 6

October 22, 2018

Name key

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (3 points) Use your calculator to evaluate each expression.

   (a) $\dfrac{8.14\,(5.3-1.22)}{16.3-8.7} \approx 4.369894737 \approx 4.37$

   (b) $\left(1+\dfrac{0.08725}{8}\right)^{8\cdot 15} \approx 3.675410004 \approx 3.68$

2. (5 points) Use your calculator to evaluate each expression at the given values.

   (a) $P\cdot\left(1+\frac{r}{n}\right)^{nt}$ when $P=1500$, $r=4.15\%$, $n=2$, and $t=25$

   $1500 * (1 + 0.0415/2) \wedge (2*25) \approx 4188.520919 \approx 4188.52$

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

   $1000 * (1 - (1 + 0.0825/12) \wedge (-12*15)) \approx 708.6603443$

   ≈ 708.66

3. (2 points) Round each number to the indicated place.

   (a) $8,657,331.95$ to the nearest hundred thousand

   $8,700,000.00$

   (b) 59.82645 to the nearest thousandth

   59.826