

## Bell Assignment

Using your graphic calculators, solve the question below. Think about the order of operations as you enter the problem in the calculator.

What is the monthly payment for a loan where the principal is \$100,000, an APR of 7.5% for a period of 15 years?

$$P = 100,000$$

$$R = .07$$

$$T = 15$$

$$M = \frac{P \left( \frac{r}{12} \right) \left( 1 + \frac{r}{12} \right)^{12(t)}}{\left( 1 + \frac{r}{12} \right)^{12(t)} - 1}$$

$$t = \frac{\ln\left(\frac{M}{P}\right) - \left(\ln\left(\frac{M}{P} - \frac{r}{12}\right)\right)}{12\ln\left(1 + \frac{r}{12}\right)}$$

<https://wa-appliedmath.org/>

