PRINT your Name:

1. If you invest $1000 at 8% annually, compounded monthly, how many months will it be until you double your money?

$$\frac{\log(1000)}{\log(1 + \frac{.08}{12})} \quad \frac{\log(2000)}{\log(1 + \frac{.08}{12})} \quad \frac{\log(1000)}{\log(1 + \frac{.08}{12})}$$

2. Suppose that at the end of each month, you put $100 into an account that pays 8% annual interest, compounded monthly. How much money will be in the account at the end of 5 years?

$$100 \left( \left(1 + \frac{.08}{12} \right)^{60} - 1 \right) \quad \left(100 + \frac{.08}{12} \right)^{60} + 1 \quad 100 \left(1 + \frac{.08}{12} \right)^{60}$$

$$1200 \left(1 + \frac{.08}{12} \right)^5 \quad \frac{100 \left(1 + \frac{.08}{12} \right)^{60}}{1 - \frac{.08}{12}} \quad \frac{100}{12} \log \left(1 + \frac{.08}{12} \right)^{60}$$

3. Suppose that at the end of each month, you put $100 into an account that pays 8% annual interest, compounded monthly. How many months will it take to have at least $2000 in the account?

$$\frac{\log 301}{\log 1 + \frac{.08}{12}} \quad \frac{\log (\frac{16}{120} + 1)}{\log (1 + \frac{.08}{12})} \quad \frac{\log(2000 + \frac{.08}{12})}{1 - \frac{.08}{12}}$$

$$\log \left(\frac{1 + \frac{.08}{12}}{\log(100 + \frac{.08}{12})}\right) \quad \frac{100 \left(1 + \frac{.08}{12} \right)^{60}}{1 + \frac{.08}{12}} \quad \frac{1}{12} \log \left(2000 + \frac{.08}{12} \right)^5$$