

Exponential and Logarithmic Functions - Worksheet #2

1. Suppose an investor deposits \$15,000 in a savings account for 8 years at 5.0% interest rate. Find the total amount of money in the account for the following compounding options. Compare your answers. How does the number of compounding periods per year affect the total investment?

(a) Compounded annually.

(b) Compounded quarterly.

(c) Compounded monthly.

(d) Compounded daily.

(e) Compounded continuously.

2. Solve the exponential equation.

(a) $3^x = 81$

(b) $5^{3x-1} = 125$

(c) $10^p = 16.8125$

(d) $2^{x+4} + 17 = 50$