

Business PreCalculus MATH 1643 Section 004, Spring 2014
Worksheet 27

1- Solve the following exponential equations:

a. $3^{2x+5} = 17$.

b. $3 \cdot 4^{2x-1} + 4 = 14$.

c. $5 \cdot 2^{2x+1} = 7 \cdot 3^{x-1}$.

2- Solve the following logarithmic equations:

a. $\log_4 \sqrt{x+3} - \log_4 \sqrt{2x-1} = \frac{1}{4}$.

b. $\log(x^2 - 6x + 9) = 0$.

c. $\ln x + \ln(x+9) = \ln 10$.

3- Find the time required for an investment of \$10,000 to grow to \$18,000 at an annual interest rate of 6% if the interest is compounded yearly.