

PROBLEMS AND SOLUTIONS - INTRODUCTION TO EXPONENTIAL AND LOGARITHMIC EQUATIONS Prepared by Ingrid Stewart, Ph.D., College of Southern Nevada Please Send Questions and Comments to ingrid.stewart@csn.edu. Thank you!

PLEASE NOTE THAT YOU CANNOT ALWAYS USE A CALCULATOR ON THE ACCUPLACER - COLLEGE-LEVEL MATHEMATICS TEST! YOU MUST BE ABLE TO DO SOME PROBLEMS WITHOUT A CALCULATOR!

Problem 1:

Change $\mathbf{4}^{\times} = \mathbf{2.5}$ to an equivalent logarithmic equation.

Problem 2:

Change $2^5 = 32$ to an equivalent logarithmic equation.

Problem 3:

Change $\log_2 8 = 3$ to an equivalent equation involving an exponent.

Problem 4:

Change $\log_{\times} 2 = 4$ to an equivalent exponential equation.

Problem 5:

Change $\log_6 5 = x$ to an equivalent exponential equation.

Problem 6:

Evaluate log_4 21 using a calculator. Round to 4 decimal places.

SOLUTIONS

You can find detailed solutions below the link for this problem set!

1. log ₄ 2.5 = x	2. log ₂ 32 = 5	3. $8 = 2^3$
$4. 2 = \mathbf{x}^4$	5. $5 = 6^{\times}$	6. 2.1962