

ACT. #22

EXPLORING LOGARITHMS

- 1) Name 4 careers that use logarithms. Write 1 sentence about how the logarithms are used in each career.**

- 2) In your own words, explain the difference between logarithmic form and exponential form. Write an example of each.**

- 3) Write down a word problem (real life problem) which requires logarithms to solve. You do not have to solve it. You may find it on the internet.**

- 4) How are logarithms used mathematically? In other words, what are their main purpose or how do they help us with mathematical computations?**

Solve the following. Remember to isolate the log portion of the problem before changing the form.

$$(5) 3 \log_2 (4x) + 10 = 16$$

$$(6) 2 \log_3 (5x-1) = 4$$

$$(7) 10 = \log_3 (2x) + 7$$

$$(8) \log_5 (3x) - 1 = -4$$

$$(9) -15 = -2 \log_6 (-3x) - 11$$

$$(10) -4 \log_3 (2x-1) = -4$$