

Practice - 1

Once you feel confident with a review of logarithms and exponential functions, complete problems 1 and 2. Check your answers by going to the Solutions tab in Moodle.

Instructions: Answer each of the following practice questions on a separate piece of paper. Step by step solutions are provided under the Solutions tab. You will learn the material more thoroughly if you complete the questions before checking the answers.

1. Find the value of y.

a.
$$y = \log_3 81$$

b.
$$y = \log_2 0.25$$

c.
$$y = \log_9 81$$

d.
$$y = \log_2 16\sqrt{2}$$

2. Determine the value of x.

a.
$$\log_3 \frac{1}{27} = x$$

b.
$$\log_5 \frac{1}{25} = -x$$

c.
$$\log_x 16 = \frac{4}{5}$$

d.
$$\log_x 64 = 2$$

e.
$$\log_{7} x = -2$$

$$f. \quad \log_2(\log_4 x) = 3$$