MATHEMATICS
MATTHAYOM 4

Name: _____ No. _____ M.4/_____

LOGARITHMIC FUNCTIONS

Evaluate.

1. $\log_3 9 =$ because 3 $= 9$
2. $\log_7 49 =$ because 7 $= 49$
3. $\log_4 4 =$ because 4 $= 4$
4. $\log_5 1 =$ because $= 1$
5. $\log_5 625 =$ because $= 625$
6. $\log_3 243 =$ because $= 243$
7. $\log_2 \left(\frac{1}{16}\right) =$ because 2 $= \frac{1}{16}$
8. $\log_3 \left(\frac{1}{9}\right) =$ because $= \frac{1}{9}$
9. $\log_5 \left(\frac{1}{125}\right) =$ because $= \frac{1}{125}$

Find x.

1. $\log_3 x = 4$ is equivalent $3^4 = x$ and thus $x =$

2. $\log_2 x = 5$ is equivalent $= x$ and thus $x =$

3. $\log_5 x = -3$ is equivalent $= x$ and thus $x = -$

4. $\log_6 x = -2$ is equivalent $= x$ and thus $x = -$

5. $\log_{12} x = 0$ is equivalent $= x$ and thus $x =$

6. $\log_{\frac{1}{4}} x = -2$ is equivalent $\frac{1}{4}$ $= x$ and thus $x =$

7. $\log_{\frac{2}{5}} x = 2$ is equivalent $\frac{2}{5}$ $= x$ and thus $x = - = -$