Math 3   Name_____

PRACTICE Quiz 7.1-7.2 Change Logarithmic Form and Inverse Logs

Rewrite each equation in logarithmic form.

1) $6^{10} = x$

2) $225^{\frac{1}{2}} = 15$

Rewrite each equation in exponential form.

3) $\log_x 198 = y$

4) $\log_{216} 6 = \frac{1}{3}$

Use a calculator to approximate each to the nearest thousandth.

5) $\ln 6.3$

6) $\log_6 64$

Find the inverse of each function.

7) $y = -\log_x 3$

8) $y = \log_5 (x + 4)$

9) $y = \log_4 (3x)$

10) $y = \log_{\frac{1}{5}} x + 3$

PRACTICE Quiz 7.1-7.2 Change Logarithmic Form and Inverse Logs

Rewrite each equation in logarithmic form.

1) $6^{10} = x$

$\log_6 x = 10$

2) $225^{\frac{1}{2}} = 15$

$\log_{225} 15 = \frac{1}{2}$

Rewrite each equation in exponential form.

3) $\log_x 198 = y$

$x^y = 198$

4) $\log_{216} 6 = \frac{1}{3}$

$216^{\frac{1}{3}} = 6$

Use a calculator to approximate each to the nearest thousandth.

5) $\ln 6.3$

1.841

6) $\log_6 64$

2.321

Find the inverse of each function.

7) $y = -\log_x 3$

$y = 3^{-\frac{1}{x}}$

8) $y = \log_5 (x + 4)$

$y = 5^x - 4$

9) $y = \log_4 (3x)$

$y = \frac{4^x}{3}$

10) $y = \log_{\frac{1}{5}} x + 3$

$y = \frac{1}{5^{x-3}}$