Name_____

Convert Between Logs & Exponential Functions

Date_____ Period____

Rewrite each equation in exponential form.

1) $\log_{16} 256 = 2$

3) $\log_2 \frac{1}{8} = -3$

5) $\log_{20} 400 = 2$

7) $\log_{13} 169 = 2$

9) $\log_9 \frac{1}{81} = -2$

11) $\log_y x = \frac{2}{3}$

13) $\log_n 117 = 11$

15) $\log_y 41 = x$

17) $\log x = y$

19) $\log_x 105 = y$

Rewrite each equation in logarithmic form.

21) $4^{\frac{1}{2}} = 2$

23) $14^{-2} = \frac{1}{196}$

25) $3^3 = 27$

27) $14^2 = 196$

29) $6^3 = 216$

31) $x^y = 101$

33) $3^n = 125$

35) $x^y = 191$

37) $x^y = 98$

39) $y^x = 72$