

Logs

Date _____ Period _____

Rewrite each equation in exponential form.

1) $\log_{169} \frac{1}{13} = -\frac{1}{2}$

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

3) $\log_3 9 = 2$

4) $\log_7 49 = 2$

5) $\log_4 \frac{1}{2} = -\frac{1}{2}$

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

Rewrite each equation in logarithmic form.

7) $\left(\frac{1}{6}\right)^2 = \frac{1}{36}$

8) $\left(\frac{1}{20}\right)^0 = 1$

9) $49^{\frac{1}{2}} = 7$

10) $625^{\frac{1}{4}} = 5$

11) $8^1 = 8$

12) $7^2 = 49$

Rewrite each equation in exponential form.

$$13) \log_{121} 11 = \frac{1}{2}$$

$$14) \log_{17} 289 = 2$$

$$15) \log_m 176 = n$$

$$16) \log_2 64 = 6$$

$$17) \log_y 144 = x$$

$$18) \log_{14} 196 = 2$$

Rewrite each equation in logarithmic form.

$$19) y^3 = x$$

$$20) m^n = 2$$

$$21) 361^{-\frac{1}{2}} = \frac{1}{19}$$

$$22) 125^{\frac{1}{3}} = 5$$

$$23) 9^2 = 81$$

$$24) 17^2 = 289$$