

Convert to logarithmic form.

$$2^4 = 16$$

$$3^2 = 9$$

$$10^3 = 1000$$

$$5^3 = 125$$

$$7^0 = 1$$

$$8^{1/3} = 2$$

Convert the exponential form.

$$\log_2 32 = 5$$

$$\log_5 25 = 2$$

$$\log_9 81 = 2$$

$$\log_{16} 4 = \frac{1}{2}$$

$$\log_2 \frac{1}{4} = -2$$

$$\log_{49} 7 = \frac{1}{2}$$

Rewrite and Solve.

$$\log_x 25 = 2$$

$$\log_6 x = 2$$

$$\log_4 2 = x$$

$$\log_3 x = -1$$

$$\log_{12} x = 1$$

$$\log_{10} 0.001 =$$

Solve each logarithmic equation:

1. $\log_3(4 - x) = \log_3(x + 8)$

2. $\log_4(x + 2) = \log_4(55)$

3. $\log_2(2x + 1) = \log_2(15)$

4. $\log_5(x + 1) = \log_5(2x + 7)$

5. $\log_3(x + 2) = \log_3(3x - 5)$

6. $\log_7(x + 3) = \log_7(5x - 8)$

19. $\log_2(x + 5) = -1$

21. $\log_2(2 + 3x) = 0$

23. $\log_4(17x - 4) = 3$

20. $\log_3(x - 2) = 3$

22. $\log_2(2x + 1) = 4$

24. $\log_4(x - 1) = -2$