

4-25-18 1st Trig

$$\textcircled{1} \log_{10} 10,000 = 4 \quad 10^{\square} = 10,000$$

$$\textcircled{2} \log_2 8 = 3 \quad 2^{\square} = 8$$

$$\textcircled{3} \log_3 9 = 2 \quad 3^{\square} = 9$$

$$\textcircled{4} \log_2 \frac{1}{8} = -3 \quad 2^{\square} = \frac{1}{8}$$

$$\textcircled{5} \log_{\frac{1}{2}} \frac{1}{32} = 5 \quad \left(\frac{1}{2}\right)^{\square} = \frac{1}{32}$$

$$\textcircled{6} \log_2 512 = 9 \quad 2^{\square} = 512$$

$$\textcircled{7} \log_7 1 = 0 \quad 7^{\square} = 1$$

$$\textcircled{8} \log_8 8 = 1 \quad 8^{\square} = 8$$

Write in log form

$$\textcircled{9} \quad 2^4 = 16 \quad \log_2 16 = 4$$

$$\textcircled{10} \quad y = 3^2 \quad \log_3 y = 2$$

$$\textcircled{11} \quad 64 = 4^x \quad \log_4 64 = x$$

$$\textcircled{12} \quad n = 2^5 \quad \log_2 n = 5$$

$$\textcircled{13} \quad y = n^x \quad \log_n y = x$$

Solve for x .

$$\textcircled{14} \quad \log_x 36 = 2$$

$$x^2 = 36$$

$$x = 6$$

$$\textcircled{15} \quad \log_3 x = 3$$

$$3^3 = x$$

$$x = 27$$

$$\textcircled{16} \quad \log_9 x = \frac{1}{2}$$

$$9^{\frac{1}{2}} = x$$

$$x = 3$$

$$\textcircled{17} \quad \log_2 \frac{x}{3} = 4$$

$$2^4 = \frac{x}{3}$$

$$3 \cdot 16 = \frac{x}{3} \cdot 3$$

$$48 = x$$

4-25-18 3rd Trig

$$\textcircled{1} \log 1000 = 3$$

$$\textcircled{2} \log_2 16 = 4 \quad 2^{\square} = 16$$

$$\textcircled{3} \log_5 25 = 2 \quad 5^{\square} = 25$$

$$\textcircled{4} \log_7 7 = 1 \quad 7^{\square} = 7$$

$$\textcircled{5} \log_8 1 = 0 \quad 8^{\square} = 1$$

$$\textcircled{6} \log_2 \frac{1}{4} = -2 \quad 2^{\square} = \frac{1}{4}$$

Write in log form

$$\textcircled{7} \quad 2^3 = 8 \quad \log_2 8 = 3$$

$$\textcircled{8} \quad y = 5^2 \quad \log_5 y = 2$$

$$\textcircled{9} \quad 4^2 = 16 \quad \log_4 16 = 2$$

$$\textcircled{10} \quad 3^x = y \quad \log_3 y = x$$

Solve for x

$$\textcircled{11} \quad \log_3 27 = x$$

$$3^x = 27 \quad x = 3$$

$$\textcircled{12} \quad \log_x 36 = 2$$

$$x^2 = 36$$

$$x = 6$$

$$\textcircled{13} \quad \log_9 x = \frac{1}{2}$$

$$9^{\frac{1}{2}} = x$$

$$x = 3$$

4-25-18 4th Try

$$\textcircled{1} \log_{10} 100 = 2 \quad 10^{\square} = 100$$

$$\textcircled{2} \log_2 8 = 3 \quad 2^{\square} = 8$$

$$\textcircled{3} \log_5 25 = 2 \quad 5^{\square} = 25$$

$$\textcircled{4} \log_7 1 = 0 \quad 7^{\square} = 1$$

$$\textcircled{5} \log_2 \frac{1}{8} = -3 \quad 2^{\square} = \frac{1}{8}$$

$\textcircled{6}$ Approximately what is

$$\log_{10} 346 \approx 2.5 \quad 10^{\square} = 346$$

$$10^1 = 10$$

$$10^2 = 100$$

$$10^3 = 1000$$

Write in log form

$$\textcircled{7} \quad 2^3 = 8 \quad \log_2 8 = 3$$

$$\textcircled{8} \quad y = 2^5 \quad \log_2 y = 5$$

$$\textcircled{9} \quad m = y^3 \quad \log_y m = 3$$

Solve for x .

$$\textcircled{10} \quad \log_x 8 = 3$$

$$x^3 = 8$$

$$x = 2$$

$$\textcircled{11} \quad \log_4 16 = x$$

$$4^x = 16$$

$$x = 2$$

$$\textcircled{12} \quad \log_2 \frac{x}{5} = 4$$

$$2^4 = \frac{x}{5}$$

$$5 \cdot 16 = \frac{x}{5} \cdot 5$$

$$80 = x$$