

4-26-18 1st Trig

Solve for x.

$$\textcircled{1} \quad \overbrace{\log 5^x}^{\leftarrow} = \log 38$$

$$\frac{x \cdot \log 5}{\log 5} = \frac{\log 38}{\log 5}$$

$$x \approx 2.26$$

$$\textcircled{2} \quad \overbrace{\log 2^x}^{\leftarrow} = \log 50$$

$$\frac{x \cdot \log 2}{\log 2} = \frac{\log 50}{\log 2}$$

$$x \approx 5.64$$

$$\textcircled{3} \quad 10 + 2^x = 51$$

$$\begin{array}{r} -10 \qquad \qquad \qquad -10 \\ \hline \end{array}$$

$$\overbrace{\log 2^x}^{\leftarrow} = \log 41$$

$$\frac{x \cdot \log 2}{\log 2} = \frac{\log 41}{\log 2}$$

$$x \approx 5.36$$

4-26-18 4th Trig

Solve for x.

$$\textcircled{1} \quad \log 2^x = \log 10$$

$$\frac{x \cdot \log 2}{\log 2} = \frac{\log 10}{\log 2}$$

$$x \approx 3.32$$

$$\textcircled{2} \quad \log 4^x = \log 100$$

$$\frac{x \cdot \log 4}{\log 4} = \frac{\log 100}{\log 4}$$

$$x \approx 3.32$$

$$\textcircled{3} \quad 8 + 2^x = 90$$

$$\begin{array}{r} 8 + 2^x = 90 \\ -8 \quad \quad -8 \\ \hline \end{array}$$

$$\frac{x \cdot \log 2}{\log 2} = \frac{\log 82}{\log 2}$$

$$x \approx 6.36$$