

Name: \_\_\_\_\_

Solve  $3^{x-4} = 5$ . Round your answer to two decimal places.

Method 1:  $\ln 3^{x-4} = \ln 5$

$$(x-4) \ln 3 = \ln 5$$

$$x-4 = \frac{\ln 5}{\ln 3}$$

$$x = \frac{\ln 5}{\ln 3} + 4$$

$$x \approx 5.46$$

Method 2:  $\log_3 5 = x-4$

$$\frac{\ln 5}{\ln 3} = x-4$$

$$x = \frac{\ln 5}{\ln 3} + 4$$

$$x \approx 5.46$$