

Number:

Textbook Section:

Title:

*Solve each equation.*

1.  $5^x = 5^{-6}$

5.  $2^x \cdot 8 = 4^{x-3}$

2.  $5^{x+3} = \frac{1}{5}$

6.  $(e^3)^x = e^2 \cdot e^x$

3.  $8^{-x+14} = 16^x$

7.  $\left(\frac{4}{9}\right)^x \cdot \left(\frac{8}{27}\right)^{1-x} = \frac{2}{3}$

4.  $(3^x)^x = 81$