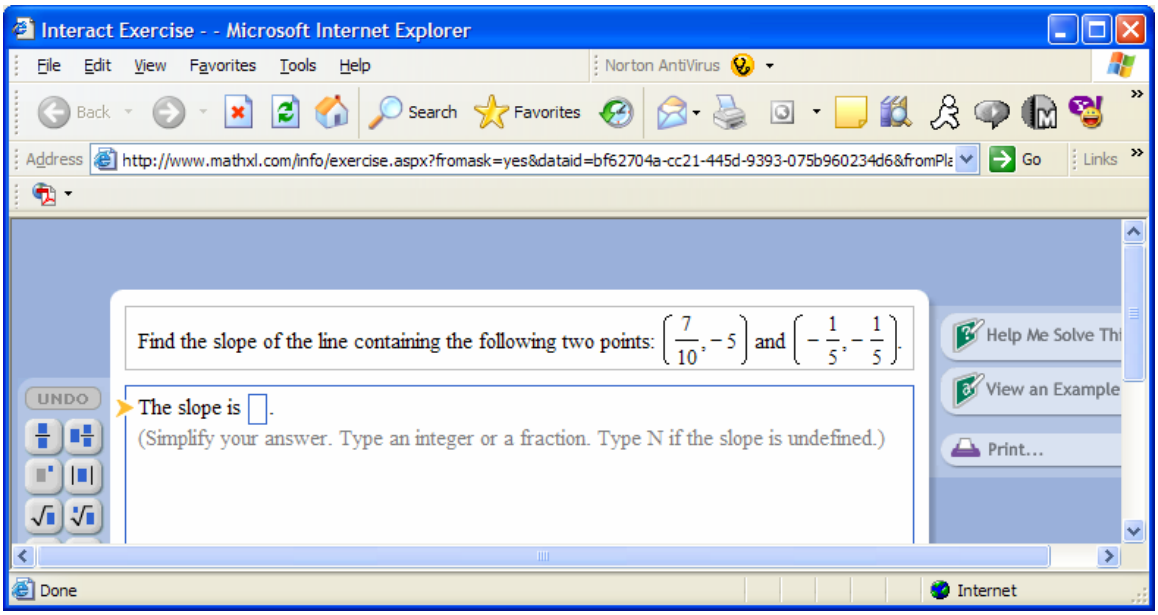
Section 3.3, #8



Let $(x_1, y_1) = \left(\frac{7}{10}, -5\right)$ and $(x_2, y_2) = \left(-\frac{1}{5}, -\frac{1}{5}\right)$.

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$m = \frac{-\frac{1}{5} - (-5)}{-\frac{1}{5} - \frac{7}{10}}$$

$$m = \frac{-\frac{1}{5} + 5}{-\frac{1}{5} - \frac{7}{10}}$$

$$m = \frac{10\left(-\frac{1}{5} + 5\right)}{10\left(-\frac{1}{5} - \frac{7}{10}\right)} = \frac{-2 + 50}{-2 - 7} = \frac{48}{-9} = -\frac{16}{3}$$

This problem involves fractions within a fraction. The key to simplifying it is to multiply the numerator and denominator of the complex fraction by the LCD of all fractions, which is 10.