

Order of Operations with Fractions (G)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\left(\left(-\frac{1}{9}\right) - \left(-\frac{3}{5}\right) + \left(-\frac{2}{5}\right)\right) \times \left(\left(-\frac{3}{4}\right)^2 \div \left(-\frac{1}{6}\right)\right)$$

$$\left(\left(\frac{1}{6} + \frac{1}{4}\right) \times \frac{3}{4}\right) \div \left(\frac{5}{9}\right)^2 - \frac{1}{5}$$

Order of Operations with Fractions (G)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned}& \left(\left(-\frac{1}{9} \right) - \left(-\frac{3}{5} \right) + \left(-\frac{2}{5} \right) \right) \times \left(\left(-\frac{3}{4} \right)^2 \div \left(-\frac{1}{6} \right) \right) \\&= \left(\frac{22}{45} + \left(-\frac{2}{5} \right) \right) \times \left(\left(-\frac{3}{4} \right)^2 \div \left(-\frac{1}{6} \right) \right) \\&= \frac{4}{45} \times \left(\left(-\frac{3}{4} \right)^2 \div \left(-\frac{1}{6} \right) \right) \\&= \frac{4}{45} \times \left(\frac{9}{16} \div \left(-\frac{1}{6} \right) \right) \\&= \frac{4}{45} \times \left(-\frac{27}{8} \right) \\&= -\frac{3}{10}\end{aligned}$$

$$\begin{aligned}& \left(\left(\frac{1}{6} + \frac{1}{4} \right) \times \frac{3}{4} \right) \div \left(\frac{5}{9} \right)^2 - \frac{1}{5} \\&= \left(\frac{5}{12} \times \frac{3}{4} \right) \div \left(\frac{5}{9} \right)^2 - \frac{1}{5} \\&= \frac{5}{16} \div \left(\frac{5}{9} \right)^2 - \frac{1}{5} \\&= \frac{5}{16} \div \frac{25}{81} - \frac{1}{5} \\&= \frac{81}{80} - \frac{1}{5} \\&= \frac{13}{16}\end{aligned}$$