

Order of Operations with Fractions (G)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\left(\frac{3}{4} - \left(\frac{1}{4}\right)^2\right) \times \frac{8}{9} \div \frac{3}{8}$$

$$\left(\frac{7}{8} \times \left(\frac{2}{3}\right)^2\right) \div \frac{3}{5} - \frac{4}{9}$$

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

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

Order of Operations with Fractions (G)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{3}{4} - \left(\frac{1}{4} \right)^2 \right) \times \frac{8}{9} \div \frac{3}{8} \\ & = \left(\frac{3}{4} - \frac{1}{16} \right) \times \frac{8}{9} \div \frac{3}{8} \\ & = \frac{11}{16} \times \frac{8}{9} \div \frac{3}{8} \\ & = \frac{11}{18} \div \frac{3}{8} \\ & = \frac{44}{27} \\ & = 1\frac{17}{27} \end{aligned}$$

$$\begin{aligned} & \left(\frac{7}{8} \times \left(\frac{2}{3} \right)^2 \right) \div \frac{3}{5} - \frac{4}{9} \\ & = \left(\frac{7}{8} \times \frac{4}{9} \right) \div \frac{3}{5} - \frac{4}{9} \\ & = \frac{7}{18} \div \frac{3}{5} - \frac{4}{9} \\ & = \frac{35}{54} - \frac{4}{9} \\ & = \frac{11}{54} \end{aligned}$$

$$\begin{aligned} & \left(\frac{4}{5} + \frac{1}{3} - \left(\frac{2}{3} \right)^2 \right) \div \frac{1}{9} \\ & = \left(\frac{4}{5} + \frac{1}{3} - \frac{4}{9} \right) \div \frac{1}{9} \\ & = \left(\frac{17}{15} - \frac{4}{9} \right) \div \frac{1}{9} \\ & = \frac{31}{45} \div \frac{1}{9} \\ & = \frac{31}{5} \\ & = 6\frac{1}{5} \end{aligned}$$

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