

Order of Operations with Fractions (F)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\frac{1}{4} \div \left(\frac{7}{8} + \frac{2}{3} - \frac{1}{8} \right) \times \frac{2}{9}$$

$$\frac{1}{2} \times \left(\frac{7}{9} \div \frac{1}{6} - \frac{5}{6} + \frac{3}{4} \right)$$

$$\frac{8}{9} \div \frac{1}{5} \times \left(\frac{4}{5} + \frac{1}{3} - \frac{2}{3} \right)$$

$$\left(\frac{5}{9} + \frac{4}{9} \right) \times \frac{7}{9} \div \frac{3}{5} - \frac{1}{2}$$

Order of Operations with Fractions (F)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \frac{1}{4} \div \left(\frac{7}{8} + \frac{2}{3} - \frac{1}{8} \right) \times \frac{2}{9} \\ &= \frac{1}{4} \div \left(\frac{37}{24} - \frac{1}{8} \right) \times \frac{2}{9} \\ &= \frac{1}{4} \div \frac{17}{12} \times \frac{2}{9} \\ &= \frac{3}{17} \times \frac{2}{9} \\ &= \frac{2}{51} \end{aligned}$$

$$\begin{aligned} & \frac{1}{2} \times \left(\frac{7}{9} \div \frac{1}{6} - \frac{5}{6} + \frac{3}{4} \right) \\ &= \frac{1}{2} \times \left(\frac{14}{3} - \frac{5}{6} + \frac{3}{4} \right) \\ &= \frac{1}{2} \times \left(\frac{23}{6} + \frac{3}{4} \right) \\ &= \frac{1}{2} \times \frac{55}{12} \\ &= \frac{55}{24} \\ &= 2\frac{7}{24} \end{aligned}$$

$$\begin{aligned} & \frac{8}{9} \div \frac{1}{5} \times \left(\frac{4}{5} + \frac{1}{3} - \frac{2}{3} \right) \\ &= \frac{8}{9} \div \frac{1}{5} \times \left(\frac{17}{15} - \frac{2}{3} \right) \\ &= \frac{8}{9} \div \frac{1}{5} \times \frac{7}{15} \\ &= \frac{40}{9} \times \frac{7}{15} \\ &= \frac{56}{27} \\ &= 2\frac{2}{27} \end{aligned}$$

$$\begin{aligned} & \left(\frac{5}{9} + \frac{4}{9} \right) \times \frac{7}{9} \div \frac{3}{5} - \frac{1}{2} \\ &= \frac{1 \times 7}{9} \div \frac{3}{5} - \frac{1}{2} \\ &= \frac{7}{9} \div \frac{3}{5} - \frac{1}{2} \\ &= \frac{35}{27} - \frac{1}{2} \\ &= \frac{43}{54} \end{aligned}$$