

# Order of Operations with Fractions (J)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Simplify each expression using the correct order of operations.

$$\left(\frac{1}{5} \div \frac{3}{8}\right) \times \left(\left(\frac{5}{6} - \frac{1}{4} + \frac{1}{9}\right) \times \frac{4}{5}\right)$$

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

$$\left(\frac{7}{8} + \frac{1}{4}\right) \div \left(\frac{7}{9} - \frac{5}{8}\right) \times \frac{4}{9} \times \frac{2}{5}$$

$$\left(\frac{2}{9} + \frac{3}{4}\right) \div \frac{7}{9} \times \left(\left(\frac{1}{5} - \frac{1}{8}\right) \times \frac{1}{3}\right)$$

# Order of Operations with Fractions (J)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{1}{5} \div \frac{3}{8}\right) \times \left(\left(\frac{5}{6} - \frac{1}{4} + \frac{1}{9}\right) \times \frac{4}{5}\right) \\ &= \frac{8}{15} \times \left(\left(\frac{5}{6} - \frac{1}{4} + \frac{1}{9}\right) \times \frac{4}{5}\right) \\ &= \frac{8}{15} \times \left(\left(\frac{7}{12} + \frac{1}{9}\right) \times \frac{4}{5}\right) \\ &= \frac{8}{15} \times \left(\frac{25}{36} \times \frac{4}{5}\right) \\ &= \frac{8}{15} \times \frac{5}{9} \\ &= \frac{8}{27} \end{aligned}$$

$$\begin{aligned} & \frac{1}{4} \times \left(\frac{3}{8} - \frac{2}{9} + \frac{5}{8}\right) \div \left(\frac{5}{9} \times \frac{1}{9}\right) \\ &= \frac{1}{4} \times \left(\frac{11}{72} + \frac{5}{8}\right) \div \left(\frac{5}{9} \times \frac{1}{9}\right) \\ &= \frac{1}{4} \times \frac{7}{9} \div \left(\frac{5}{9} \times \frac{1}{9}\right) \\ &= \frac{1}{4} \times \frac{7}{9} \div \frac{5}{81} \\ &= \frac{7}{36} \div \frac{5}{81} \\ &= \frac{63}{20} \\ &= 3\frac{3}{20} \end{aligned}$$

$$\begin{aligned} & \left(\frac{7}{8} + \frac{1}{4}\right) \div \left(\frac{7}{9} - \frac{5}{8}\right) \times \frac{4}{9} \times \frac{2}{5} \\ &= \frac{9}{8} \div \left(\frac{7}{9} - \frac{5}{8}\right) \times \frac{4}{9} \times \frac{2}{5} \\ &= \frac{9}{8} \div \frac{11}{72} \times \frac{4}{9} \times \frac{2}{5} \\ &= \frac{81}{11} \times \frac{4}{9} \times \frac{2}{5} \\ &= \frac{36}{11} \times \frac{2}{5} \\ &= \frac{72}{55} \\ &= 1\frac{17}{55} \end{aligned}$$

$$\begin{aligned} & \left(\frac{2}{9} + \frac{3}{4}\right) \div \frac{7}{9} \times \left(\left(\frac{1}{5} - \frac{1}{8}\right) \times \frac{1}{3}\right) \\ &= \frac{35}{36} \div \frac{7}{9} \times \left(\left(\frac{1}{5} - \frac{1}{8}\right) \times \frac{1}{3}\right) \\ &= \frac{35}{36} \div \frac{7}{9} \times \left(\frac{3}{40} \times \frac{1}{3}\right) \\ &= \frac{35}{36} \div \frac{7}{9} \times \frac{1}{40} \\ &= \frac{5}{4} \times \frac{1}{40} \\ &= \frac{1}{32} \end{aligned}$$