

# Order of Operations with Fractions (I)

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

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

Simplify each expression using the correct order of operations.

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

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

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

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

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

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

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

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

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

# Order of Operations with Fractions (I)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \frac{1}{4} \div \left( \frac{1}{8} + \frac{2}{9} \times \frac{1}{2} \right) \\ &= \frac{1}{4} \div \left( \frac{1}{8} + \frac{1}{9} \right) \\ &= \frac{1}{4} \div \frac{17}{72} \\ &= \frac{18}{17} \\ &= 1\frac{1}{17} \end{aligned}$$

$$\begin{aligned} & \left( \frac{3}{4} \times \frac{4}{5} + \frac{5}{8} \right) \div \frac{2}{5} \\ &= \left( \frac{3}{5} + \frac{5}{8} \right) \div \frac{2}{5} \\ &= \frac{49}{40} \div \frac{2}{5} \\ &= \frac{49}{16} \\ &= 3\frac{1}{16} \end{aligned}$$

$$\begin{aligned} & \left( \frac{7}{9} - \frac{2}{3} + \frac{1}{2} \right) \times \frac{1}{4} \\ &= \left( \frac{1}{9} + \frac{1}{2} \right) \times \frac{1}{4} \\ &= \frac{11}{18} \times \frac{1}{4} \\ &= \frac{11}{72} \end{aligned}$$

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

$$\begin{aligned} & \left( \frac{2}{3} \times \frac{7}{8} + \frac{7}{9} \right) \div \frac{3}{8} \\ &= \left( \frac{7}{12} + \frac{7}{9} \right) \div \frac{3}{8} \\ &= \frac{49}{36} \div \frac{3}{8} \\ &= \frac{98}{27} \\ &= 3\frac{17}{27} \end{aligned}$$

$$\begin{aligned} & \frac{3}{5} \div \left( \frac{3}{4} - \frac{2}{3} \times \frac{1}{5} \right) \\ &= \frac{3}{5} \div \left( \frac{3}{4} - \frac{2}{15} \right) \\ &= \frac{3}{5} \div \frac{37}{60} \\ &= \frac{36}{37} \end{aligned}$$

$$\begin{aligned} & \frac{4}{5} \times \frac{5}{6} \div \left( \frac{3}{8} + \frac{8}{9} \right) \\ &= \frac{4}{5} \times \frac{5}{6} \div \frac{91}{72} \\ &= \frac{2}{3} \div \frac{91}{72} \\ &= \frac{48}{91} \end{aligned}$$

$$\begin{aligned} & \left( \frac{4}{9} + \frac{2}{5} - \frac{1}{3} \right) \div \frac{3}{5} \\ &= \left( \frac{38}{45} - \frac{1}{3} \right) \div \frac{3}{5} \\ &= \frac{23}{45} \div \frac{3}{5} \\ &= \frac{23}{27} \end{aligned}$$

$$\begin{aligned} & \left( \frac{8}{9} + \frac{1}{3} - \frac{4}{9} \right) \times \frac{4}{5} \\ &= \left( \frac{11}{9} - \frac{4}{9} \right) \times \frac{4}{5} \\ &= \frac{7}{9} \times \frac{4}{5} \\ &= \frac{28}{45} \end{aligned}$$