

Order of Operations with Fractions (E)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

$$\left(\frac{7}{9} + \frac{8}{9} - \frac{5}{6} \right) \times \frac{5}{8}$$

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

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

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

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

$$\left(\frac{5}{9} + \frac{5}{6} \right) \div \left(\frac{2}{3} \times \frac{5}{8} \right)$$

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

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$$\begin{aligned} & \frac{5}{8} \times \left(\frac{4}{5} - \frac{1}{4} + \frac{2}{3} \right) \\ &= \frac{5}{8} \times \left(\frac{11}{20} + \frac{2}{3} \right) \\ &= \frac{5}{8} \times \frac{73}{60} \\ &= \frac{73}{96} \end{aligned}$$

$$\begin{aligned} & \frac{1}{2} + \frac{3}{4} \div \left(\frac{1}{3} - \frac{2}{9} \right) \\ &= \frac{1}{2} + \frac{3}{4} \div \frac{1}{9} \\ &= \frac{1}{2} + \frac{27}{4} \\ &= \frac{29}{4} \\ &= 7\frac{1}{4} \end{aligned}$$

$$\begin{aligned} & \left(\frac{7}{9} + \frac{8}{9} - \frac{5}{6} \right) \times \frac{5}{8} \\ &= \left(\frac{5}{3} - \frac{5}{6} \right) \times \frac{5}{8} \\ &= \frac{5}{6} \times \frac{5}{8} \\ &= \frac{25}{48} \end{aligned}$$

$$\begin{aligned} & \frac{5}{8} \div \left(\frac{3}{8} + \frac{4}{9} - \frac{3}{4} \right) \\ &= \frac{5}{8} \div \left(\frac{59}{72} - \frac{3}{4} \right) \\ &= \frac{5}{8} \div \frac{5}{72} \\ &= 9 \end{aligned}$$

$$\begin{aligned} & \left(\frac{1}{2} - \frac{1}{8} \right) \div \frac{7}{8} \times \frac{7}{9} \\ &= \frac{3}{8} \div \frac{7}{8} \times \frac{7}{9} \\ &= \frac{3}{7} \times \frac{7}{9} \\ &= \frac{1}{3} \end{aligned}$$

$$\begin{aligned} & \frac{3}{4} \div \left(\frac{1}{4} \times \frac{1}{8} + \frac{1}{2} \right) \\ &= \frac{3}{4} \div \left(\frac{1}{32} + \frac{1}{2} \right) \\ &= \frac{3}{4} \div \frac{17}{32} \\ &= \frac{24}{17} \\ &= 1\frac{7}{17} \end{aligned}$$

$$\begin{aligned} & \frac{1}{5} \div \frac{1}{6} \times \left(\frac{8}{9} - \frac{3}{8} \right) \\ &= \frac{1}{5} \div \frac{1}{6} \times \frac{37}{72} \\ &= \frac{6}{5} \times \frac{37}{72} \\ &= \frac{37}{60} \end{aligned}$$

$$\begin{aligned} & \left(\frac{5}{9} + \frac{5}{6} \right) \div \left(\frac{2}{3} \times \frac{5}{8} \right) \\ &= \frac{25}{18} \div \left(\frac{2}{3} \times \frac{5}{8} \right) \\ &= \frac{25}{18} \div \frac{5}{12} \\ &= \frac{10}{3} \\ &= 3\frac{1}{3} \end{aligned}$$

$$\begin{aligned} & \left(\frac{1}{8} + \frac{5}{8} - \frac{1}{3} \right) \div \frac{1}{2} \\ &= \left(\frac{3}{4} - \frac{1}{3} \right) \div \frac{1}{2} \\ &= \frac{5}{12} \div \frac{1}{2} \\ &= \frac{5}{6} \end{aligned}$$