

# Order of Operations with Fractions (A)

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

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

Simplify each expression using the correct order of operations.

$$\frac{5}{6} + \frac{3}{4} \div \left(\frac{3}{5}\right)^2$$

$$\left(\frac{5}{6}\right)^2 \div \left(\frac{5}{8} - \frac{4}{9}\right)$$

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

$$\frac{7}{8} \div \left(\frac{2}{3} - \left(\frac{1}{3}\right)^2\right)$$

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

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

$$\frac{3}{4} - \frac{1}{6} \div \left(\frac{4}{5}\right)^2$$

$$\left(\frac{1}{9}\right)^2 \div \frac{4}{9} + \frac{1}{6}$$

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

# Order of Operations with Fractions (A)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \frac{5}{6} + \frac{3}{4} \div \left(\frac{3}{5}\right)^2 \\ &= \frac{5}{6} + \frac{3}{4} \div \frac{9}{25} \\ &= \frac{5}{6} + \frac{25}{12} \\ &= \frac{35}{12} \\ &= 2\frac{11}{12} \end{aligned}$$

$$\begin{aligned} & \left(\frac{5}{6}\right)^2 \div \left(\frac{5}{8} - \frac{4}{9}\right) \\ &= \left(\frac{5}{6}\right)^2 \div \frac{13}{72} \\ &= \frac{25}{36} \div \frac{13}{72} \\ &= \frac{50}{13} \\ &= 3\frac{11}{13} \end{aligned}$$

$$\begin{aligned} & \frac{1}{9} \times \frac{5}{8} + \left(\frac{1}{2}\right)^3 \\ &= \frac{1}{9} \times \frac{5}{8} + \frac{1}{8} \\ &= \frac{5}{72} + \frac{1}{8} \\ &= \frac{7}{36} \end{aligned}$$

$$\begin{aligned} & \frac{7}{8} \div \left(\frac{2}{3} - \left(\frac{1}{3}\right)^2\right) \\ &= \frac{7}{8} \div \left(\frac{2}{3} - \frac{1}{9}\right) \\ &= \frac{7}{8} \div \frac{5}{9} \\ &= \frac{63}{40} \\ &= 1\frac{23}{40} \end{aligned}$$

$$\begin{aligned} & \left(\frac{3}{5} + \frac{2}{5}\right) \times \left(\frac{1}{9}\right)^2 \\ &= 1 \times \left(\frac{1}{9}\right)^2 \\ &= 1 \times \frac{1}{81} \\ &= \frac{1}{81} \end{aligned}$$

$$\begin{aligned} & \left(\frac{5}{6} - \left(\frac{1}{3}\right)^2\right) \times \frac{1}{2} \\ &= \left(\frac{5}{6} - \frac{1}{9}\right) \times \frac{1}{2} \\ &= \frac{13}{18} \times \frac{1}{2} \\ &= \frac{13}{36} \end{aligned}$$

$$\begin{aligned} & \frac{3}{4} - \frac{1}{6} \div \left(\frac{4}{5}\right)^2 \\ &= \frac{3}{4} - \frac{1}{6} \div \frac{16}{25} \\ &= \frac{3}{4} - \frac{25}{96} \\ &= \frac{47}{96} \end{aligned}$$

$$\begin{aligned} & \left(\frac{1}{9}\right)^2 \div \frac{4}{9} + \frac{1}{6} \\ &= \frac{1}{81} \div \frac{4}{9} + \frac{1}{6} \\ &= \frac{1}{36} + \frac{1}{6} \\ &= \frac{7}{36} \end{aligned}$$

$$\begin{aligned} & \left(\frac{3}{4}\right)^2 \times \frac{3}{5} + \frac{1}{2} \\ &= \frac{9}{16} \times \frac{3}{5} + \frac{1}{2} \\ &= \frac{27}{80} + \frac{1}{2} \\ &= \frac{67}{80} \end{aligned}$$

## Order of Operations with Fractions (B)

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

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

Simplify each expression using the correct order of operations.

$$\left(\left(\frac{1}{4}\right)^2 + \frac{5}{6}\right) \times \frac{3}{4}$$

$$\left(\frac{3}{5} - \frac{1}{4}\right) \div \left(\frac{1}{6}\right)^2$$

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

$$\frac{5}{6} - \left(\frac{1}{3}\right)^2 \div \frac{5}{8}$$

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

$$\frac{4}{5} - \frac{1}{8} \div \left(\frac{5}{8}\right)^2$$

$$\left(\left(\frac{1}{4}\right)^2 + \frac{1}{6}\right) \div \frac{1}{8}$$

$$\left(\frac{5}{6}\right)^2 \times \left(\frac{1}{4} + \frac{7}{8}\right)$$

$$\frac{1}{6} \div \left(\frac{7}{9} + \left(\frac{1}{3}\right)^3\right)$$

# Order of Operations with Fractions (B)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left( \frac{1}{4} \right)^2 + \frac{5}{6} \times \frac{3}{4} \\ &= \left( \frac{1}{16} + \frac{5}{6} \right) \times \frac{3}{4} \\ &= \frac{43}{48} \times \frac{3}{4} \\ &= \frac{43}{64} \end{aligned}$$

$$\begin{aligned} & \left( \frac{3}{5} - \frac{1}{4} \right) \div \left( \frac{1}{6} \right)^2 \\ &= \frac{7}{20} \div \left( \frac{1}{6} \right)^2 \\ &= \frac{7}{20} \div \frac{1}{36} \\ &= \frac{63}{5} \\ &= 12\frac{3}{5} \end{aligned}$$

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

$$\begin{aligned} & \frac{5}{6} - \left( \frac{1}{3} \right)^2 \div \frac{5}{8} \\ &= \frac{5}{6} - \frac{1}{9} \div \frac{5}{8} \\ &= \frac{5}{6} - \frac{8}{45} \\ &= \frac{59}{90} \end{aligned}$$

$$\begin{aligned} & \frac{3}{8} \times \left( \frac{2}{3} + \frac{5}{6} \right)^3 \\ &= \frac{3}{8} \times \left( \frac{3}{2} \right)^3 \\ &= \frac{3}{8} \times \frac{27}{8} \\ &= \frac{81}{64} \\ &= 1\frac{17}{64} \end{aligned}$$

$$\begin{aligned} & \frac{4}{5} - \frac{1}{8} \div \left( \frac{5}{8} \right)^2 \\ &= \frac{4}{5} - \frac{1}{8} \div \frac{25}{64} \\ &= \frac{4}{5} - \frac{8}{25} \\ &= \frac{12}{25} \end{aligned}$$

$$\begin{aligned} & \left( \left( \frac{1}{4} \right)^2 + \frac{1}{6} \right) \div \frac{1}{8} \\ &= \left( \frac{1}{16} + \frac{1}{6} \right) \div \frac{1}{8} \\ &= \frac{11}{48} \div \frac{1}{8} \\ &= \frac{11}{6} \\ &= 1\frac{5}{6} \end{aligned}$$

$$\begin{aligned} & \left( \frac{5}{6} \right)^2 \times \left( \frac{1}{4} + \frac{7}{8} \right) \\ &= \left( \frac{5}{6} \right)^2 \times \frac{9}{8} \\ &= \frac{25}{36} \times \frac{9}{8} \\ &= \frac{25}{32} \end{aligned}$$

$$\begin{aligned} & \frac{1}{6} \div \left( \frac{7}{9} + \left( \frac{1}{3} \right)^3 \right) \\ &= \frac{1}{6} \div \left( \frac{7}{9} + \frac{1}{27} \right) \\ &= \frac{1}{6} \div \frac{22}{27} \\ &= \frac{9}{44} \end{aligned}$$

## Order of Operations with Fractions (C)

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

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

Simplify each expression using the correct order of operations.

$$\left(\frac{4}{5}\right)^2 + \frac{1}{8} \div \frac{1}{4}$$

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

$$\left(\frac{3}{4}\right)^2 + \frac{5}{6} \div \frac{5}{9}$$

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

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

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

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

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

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

# Order of Operations with Fractions (C)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{4}{5}\right)^2 + \frac{1}{8} \div \frac{1}{4} \\ &= \frac{16}{25} + \frac{1}{8} \div \frac{1}{4} \\ &= \frac{16}{25} + \frac{1}{2} \\ &= \frac{57}{50} \\ &= 1\frac{7}{50} \end{aligned}$$

$$\begin{aligned} & \left(\frac{1}{9} + \frac{2}{9}\right) \div \left(\frac{4}{9}\right)^2 \\ &= \frac{1}{3} \div \left(\frac{4}{9}\right)^2 \\ &= \frac{1}{3} \div \frac{16}{81} \\ &= \frac{27}{16} \\ &= 1\frac{11}{16} \end{aligned}$$

$$\begin{aligned} & \left(\frac{3}{4}\right)^2 + \frac{5}{6} \div \frac{5}{9} \\ &= \frac{9}{16} + \frac{5}{6} \div \frac{5}{9} \\ &= \frac{9}{16} + \frac{3}{2} \\ &= \frac{33}{16} \\ &= 2\frac{1}{16} \end{aligned}$$

$$\begin{aligned} & \frac{2}{9} \div \left(\frac{1}{6} - \left(\frac{1}{3}\right)^2\right) \\ &= \frac{2}{9} \div \left(\frac{1}{6} - \frac{1}{9}\right) \\ &= \frac{2}{9} \div \frac{1}{18} \\ &= 4 \end{aligned}$$

$$\begin{aligned} & \left(\frac{3}{4} - \frac{2}{9}\right) \times \left(\frac{3}{5}\right)^2 \\ &= \frac{19}{36} \times \left(\frac{3}{5}\right)^2 \\ &= \frac{19}{36} \times \frac{9}{25} \\ &= \frac{19}{100} \end{aligned}$$

$$\begin{aligned} & \frac{2}{3} - \left(\frac{3}{8}\right)^2 \div \frac{3}{4} \\ &= \frac{2}{3} - \frac{9}{64} \div \frac{3}{4} \\ &= \frac{2}{3} - \frac{3}{16} \\ &= \frac{23}{48} \end{aligned}$$

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

$$\begin{aligned} & \frac{4}{9} \times \frac{1}{4} - \left(\frac{1}{9}\right)^2 \\ &= \frac{4}{9} \times \frac{1}{4} - \frac{1}{81} \\ &= \frac{1}{9} - \frac{1}{81} \\ &= \frac{8}{81} \end{aligned}$$

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

## Order of Operations with Fractions (D)

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

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

Simplify each expression using the correct order of operations.

$$\frac{4}{9} \div \left( \frac{5}{6} + \frac{1}{6} \right)^2$$

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

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

$$\left( \frac{5}{8} \right)^2 + \frac{1}{6} \times \frac{3}{8}$$

$$\frac{1}{4} \div \left( \left( \frac{7}{8} \right)^2 - \frac{1}{2} \right)$$

$$\left( \frac{5}{6} - \left( \frac{1}{2} \right)^2 \right) \div \frac{3}{4}$$

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

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

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

# Order of Operations with Fractions (D)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \frac{4}{9} \div \left( \frac{5}{6} + \frac{1}{6} \right)^2 \\ &= \frac{4}{9} \div \underline{1^2} \\ &= \frac{4}{9} \div 1 \\ &= \underline{\frac{4}{9}} \end{aligned}$$

$$\begin{aligned} & \frac{2}{9} \div \left( \frac{1}{2} \right)^3 - \frac{2}{5} \\ &= \frac{2}{9} \div \underline{\frac{1}{8}} - \frac{2}{5} \\ &= \frac{16}{9} - \frac{2}{5} \\ &= \frac{62}{45} \\ &= 1 \frac{17}{45} \end{aligned}$$

$$\begin{aligned} & \frac{8}{9} \times \left( \frac{2}{9} + \left( \frac{1}{2} \right)^2 \right) \\ &= \frac{8}{9} \times \left( \frac{2}{9} + \frac{1}{4} \right) \\ &= \frac{8}{9} \times \frac{17}{36} \\ &= \frac{34}{81} \end{aligned}$$

$$\begin{aligned} & \left( \frac{5}{8} \right)^2 + \frac{1}{6} \times \frac{3}{8} \\ &= \frac{25}{64} + \frac{1}{6} \times \frac{3}{8} \\ &= \frac{25}{64} + \frac{1}{16} \\ &= \frac{29}{64} \end{aligned}$$

$$\begin{aligned} & \frac{1}{4} \div \left( \left( \frac{7}{8} \right)^2 - \frac{1}{2} \right) \\ &= \frac{1}{4} \div \left( \frac{49}{64} - \frac{1}{2} \right) \\ &= \frac{1}{4} \div \frac{17}{64} \\ &= \frac{16}{17} \end{aligned}$$

$$\begin{aligned} & \left( \frac{5}{6} - \left( \frac{1}{2} \right)^2 \right) \div \frac{3}{4} \\ &= \left( \frac{5}{6} - \frac{1}{4} \right) \div \frac{3}{4} \\ &= \frac{7}{12} \div \frac{3}{4} \\ &= \frac{7}{9} \end{aligned}$$

$$\begin{aligned} & \left( \frac{1}{2} \right)^3 \times \left( \frac{1}{9} + \frac{5}{9} \right) \\ &= \left( \frac{1}{2} \right)^3 \times \frac{2}{3} \\ &= \frac{1}{8} \times \frac{2}{3} \\ &= \frac{1}{12} \end{aligned}$$

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

$$\begin{aligned} & \frac{4}{9} + \frac{4}{5} \div \left( \frac{3}{5} \right)^2 \\ &= \frac{4}{9} + \frac{4}{5} \div \frac{9}{25} \\ &= \frac{4}{9} + \frac{20}{9} \\ &= \frac{8}{3} \\ &= 2 \frac{2}{3} \end{aligned}$$



## Order of Operations with Fractions (E)

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

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

Simplify each expression using the correct order of operations.

$$\left(\frac{5}{8}\right)^2 \div \left(\frac{2}{3} - \frac{1}{6}\right)$$

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

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

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

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

$$\left(\frac{1}{6} + \frac{1}{2}\right) \times \left(\frac{2}{3}\right)^3$$

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

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

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

# Order of Operations with Fractions (E)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{5}{8}\right)^2 \div \left(\frac{2}{3} - \frac{1}{6}\right) \\ &= \left(\frac{5}{8}\right)^2 \div \frac{1}{2} \\ &= \frac{25}{64} \div \frac{1}{2} \\ &= \frac{25}{32} \end{aligned}$$

$$\begin{aligned} & \frac{2}{3} - \frac{1}{5} \times \left(\frac{5}{6}\right)^2 \\ &= \frac{2}{3} - \frac{1}{5} \times \frac{25}{36} \\ &= \frac{2}{3} - \frac{5}{36} \\ &= \frac{19}{36} \end{aligned}$$

$$\begin{aligned} & \frac{7}{8} + \frac{5}{8} \div \left(\frac{1}{4}\right)^2 \\ &= \frac{7}{8} + \frac{5}{8} \div \frac{1}{16} \\ &= \frac{7}{8} + 10 \\ &= \frac{87}{8} \\ &= 10\frac{7}{8} \end{aligned}$$

$$\begin{aligned} & \left(\frac{3}{4}\right)^2 \times \frac{4}{5} + \frac{1}{4} \\ &= \frac{9}{16} \times \frac{4}{5} + \frac{1}{4} \\ &= \frac{9}{20} + \frac{1}{4} \\ &= \frac{7}{10} \end{aligned}$$

$$\begin{aligned} & \left(\frac{1}{9}\right)^2 \div \frac{1}{3} + \frac{2}{3} \\ &= \frac{1}{81} \div \frac{1}{3} + \frac{2}{3} \\ &= \frac{1}{27} + \frac{2}{3} \\ &= \frac{19}{27} \end{aligned}$$

$$\begin{aligned} & \left(\frac{1}{6} + \frac{1}{2}\right) \times \left(\frac{2}{3}\right)^3 \\ &= \frac{2}{3} \times \left(\frac{2}{3}\right)^3 \\ &= \frac{2}{3} \times \frac{8}{27} \\ &= \frac{16}{81} \end{aligned}$$

$$\begin{aligned} & \frac{5}{9} \times \left(\frac{1}{5}\right)^2 + \frac{3}{5} \\ &= \frac{5}{9} \times \frac{1}{25} + \frac{3}{5} \\ &= \frac{1}{45} + \frac{3}{5} \\ &= \frac{28}{45} \end{aligned}$$

$$\begin{aligned} & \left(\frac{2}{3} - \frac{1}{9}\right)^2 \times \frac{1}{5} \\ &= \left(\frac{5}{9}\right)^2 \times \frac{1}{5} \\ &= \frac{25}{81} \times \frac{1}{5} \\ &= \frac{5}{81} \end{aligned}$$

$$\begin{aligned} & \frac{2}{3} \div \frac{5}{9} - \left(\frac{1}{2}\right)^2 \\ &= \frac{2}{3} \div \frac{5}{9} - \frac{1}{4} \\ &= \frac{6}{5} - \frac{1}{4} \\ &= \frac{19}{20} \end{aligned}$$

# Order of Operations with Fractions (F)

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

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

Simplify each expression using the correct order of operations.

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

$$\left(\frac{2}{3} + \frac{7}{8}\right) \times \left(\frac{1}{2}\right)^2$$

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

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

$$\left(\frac{2}{5} + \frac{4}{5}\right)^2 \div \frac{8}{9}$$

$$\frac{5}{6} - \frac{1}{5} \div \left(\frac{3}{4}\right)^2$$

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

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

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

# Order of Operations with Fractions (F)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \frac{3}{4} \times \frac{7}{8} - \left(\frac{3}{8}\right)^2 \\ &= \frac{3}{4} \times \frac{7}{8} - \frac{9}{64} \\ &= \frac{21}{32} - \frac{9}{64} \\ &= \frac{33}{64} \end{aligned}$$

$$\begin{aligned} & \left(\frac{2}{3} + \frac{7}{8}\right) \times \left(\frac{1}{2}\right)^2 \\ &= \frac{37}{24} \times \left(\frac{1}{2}\right)^2 \\ &= \frac{37}{24} \times \frac{1}{4} \\ &= \frac{37}{96} \end{aligned}$$

$$\begin{aligned} & \frac{8}{9} + \frac{2}{5} \times \left(\frac{2}{3}\right)^2 \\ &= \frac{8}{9} + \frac{2}{5} \times \frac{4}{9} \\ &= \frac{8}{9} + \frac{8}{45} \\ &= \frac{16}{15} \\ &= 1\frac{1}{15} \end{aligned}$$

$$\begin{aligned} & \frac{1}{3} \times \left(\frac{5}{6} + \frac{1}{2}\right)^2 \\ &= \frac{1}{3} \times \left(\frac{4}{3}\right)^2 \\ &= \frac{1}{3} \times \frac{16}{9} \\ &= \frac{16}{27} \end{aligned}$$

$$\begin{aligned} & \left(\frac{2}{5} + \frac{4}{5}\right)^2 \div \frac{8}{9} \\ &= \left(\frac{6}{5}\right)^2 \div \frac{8}{9} \\ &= \frac{36}{25} \div \frac{8}{9} \\ &= \frac{81}{50} \\ &= 1\frac{31}{50} \end{aligned}$$

$$\begin{aligned} & \frac{5}{6} - \frac{1}{5} \div \left(\frac{3}{4}\right)^2 \\ &= \frac{5}{6} - \frac{1}{5} \div \frac{9}{16} \\ &= \frac{5}{6} - \frac{16}{45} \\ &= \frac{43}{90} \end{aligned}$$

$$\begin{aligned} & \frac{7}{9} \times \left(\frac{3}{8} + \frac{1}{8}\right)^2 \\ &= \frac{7}{9} \times \left(\frac{1}{2}\right)^2 \\ &= \frac{7}{9} \times \frac{1}{4} \\ &= \frac{7}{36} \end{aligned}$$

$$\begin{aligned} & \frac{3}{4} \times \left(\frac{4}{5} - \left(\frac{3}{5}\right)^2\right) \\ &= \frac{3}{4} \times \left(\frac{4}{5} - \frac{9}{25}\right) \\ &= \frac{3}{4} \times \frac{11}{25} \\ &= \frac{33}{100} \end{aligned}$$

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

# Order of Operations with Fractions (G)

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

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

Simplify each expression using the correct order of operations.

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

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

$$\frac{2}{5} - \left( \frac{1}{8} \right)^2 \div \frac{1}{4}$$

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

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

$$\left( \frac{7}{8} - \frac{3}{8} \right) \times \left( \frac{1}{2} \right)^2$$

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

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

$$\left( \frac{5}{6} - \frac{1}{6} \right)^3 \div \frac{1}{4}$$

# Order of Operations with Fractions (G)

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

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

Simplify each expression using the correct order of operations.

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

$$\begin{aligned} & \left( \frac{1}{3} \right)^2 + \frac{4}{9} \times \frac{3}{8} \\ &= \left( \frac{1}{9} + \frac{4}{9} \right) \times \frac{3}{8} \\ &= \frac{5}{9} \times \frac{3}{8} \\ &= \frac{5}{24} \end{aligned}$$

$$\begin{aligned} & \frac{2}{5} - \left( \frac{1}{8} \right)^2 \div \frac{1}{4} \\ &= \frac{2}{5} - \frac{1}{64} \div \frac{1}{4} \\ &= \frac{2}{5} - \frac{1}{16} \\ &= \frac{27}{80} \end{aligned}$$

$$\begin{aligned} & \frac{1}{3} + \frac{3}{4} \div \left( \frac{1}{2} \right)^3 \\ &= \frac{1}{3} + \frac{3}{4} \div \frac{1}{8} \\ &= \frac{1}{3} + 6 \\ &= \frac{19}{3} \\ &= 6\frac{1}{3} \end{aligned}$$

$$\begin{aligned} & \left( \frac{1}{3} \right)^2 \times \frac{2}{5} + \frac{2}{3} \\ &= \frac{1}{9} \times \frac{2}{5} + \frac{2}{3} \\ &= \frac{2}{45} + \frac{2}{3} \\ &= \frac{32}{45} \end{aligned}$$

$$\begin{aligned} & \left( \frac{7}{8} - \frac{3}{8} \right) \times \left( \frac{1}{2} \right)^2 \\ &= \frac{1}{2} \times \left( \frac{1}{2} \right)^2 \\ &= \frac{1}{2} \times \frac{1}{4} \\ &= \frac{1}{8} \end{aligned}$$

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

$$\begin{aligned} & \frac{7}{8} \div \left( \frac{3}{4} \right)^3 + \frac{2}{9} \\ &= \frac{7}{8} \div \frac{27}{64} + \frac{2}{9} \\ &= \frac{56}{27} + \frac{2}{9} \\ &= \frac{62}{27} \\ &= 2\frac{8}{27} \end{aligned}$$

$$\begin{aligned} & \left( \frac{5}{6} - \frac{1}{6} \right)^3 \div \frac{1}{4} \\ &= \left( \frac{2}{3} \right)^3 \div \frac{1}{4} \\ &= \frac{8}{27} \div \frac{1}{4} \\ &= \frac{32}{27} \\ &= 1\frac{5}{27} \end{aligned}$$

# Order of Operations with Fractions (H)

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

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

Simplify each expression using the correct order of operations.

$$\frac{4}{9} \times \left( \frac{5}{9} - \left( \frac{1}{6} \right)^2 \right)$$

$$\frac{1}{8} \div \frac{5}{6} + \left( \frac{2}{5} \right)^2$$

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

$$\frac{1}{3} \div \left( \frac{1}{4} + \left( \frac{5}{6} \right)^2 \right)$$

$$\left( \frac{5}{9} \right)^2 \times \left( \frac{3}{5} + \frac{2}{5} \right)$$

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

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

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

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

# Order of Operations with Fractions (H)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \frac{4}{9} \times \left( \frac{5}{9} - \left( \frac{1}{6} \right)^2 \right) \\ &= \frac{4}{9} \times \left( \frac{5}{9} - \frac{1}{36} \right) \\ &= \frac{4}{9} \times \frac{19}{36} \\ &= \frac{19}{81} \end{aligned}$$

$$\begin{aligned} & \frac{1}{8} \div \frac{5}{6} + \left( \frac{2}{5} \right)^2 \\ &= \frac{1}{8} \div \frac{5}{6} + \frac{4}{25} \\ &= \frac{3}{20} + \frac{4}{25} \\ &= \frac{31}{100} \end{aligned}$$

$$\begin{aligned} & \left( \frac{3}{4} \right)^2 + \frac{7}{8} \times \frac{3}{5} \\ &= \frac{9}{16} + \frac{7}{8} \times \frac{3}{5} \\ &= \frac{9}{16} + \frac{21}{40} \\ &= \frac{87}{80} \\ &= 1\frac{7}{80} \end{aligned}$$

$$\begin{aligned} & \frac{1}{3} \div \left( \frac{1}{4} + \left( \frac{5}{6} \right)^2 \right) \\ &= \frac{1}{3} \div \left( \frac{1}{4} + \frac{25}{36} \right) \\ &= \frac{1}{3} \div \frac{17}{18} \\ &= \frac{6}{17} \end{aligned}$$

$$\begin{aligned} & \left( \frac{5}{9} \right)^2 \times \left( \frac{3}{5} + \frac{2}{5} \right) \\ &= \left( \frac{5}{9} \right)^2 \times 1 \\ &= \frac{25}{81} \times 1 \\ &= \frac{25}{81} \end{aligned}$$

$$\begin{aligned} & \left( \frac{3}{4} \right)^2 \div \left( \frac{1}{5} + \frac{3}{8} \right) \\ &= \left( \frac{3}{4} \right)^2 \div \frac{23}{40} \\ &= \frac{9}{16} \div \frac{23}{40} \\ &= \frac{45}{46} \end{aligned}$$

$$\begin{aligned} & \frac{8}{9} \times \frac{1}{3} + \left( \frac{4}{9} \right)^2 \\ &= \frac{8}{9} \times \frac{1}{3} + \frac{16}{81} \\ &= \frac{8}{27} + \frac{16}{81} \\ &= \frac{40}{81} \end{aligned}$$

$$\begin{aligned} & \frac{3}{8} \times \left( \frac{8}{9} + \left( \frac{2}{9} \right)^2 \right) \\ &= \frac{3}{8} \times \left( \frac{8}{9} + \frac{4}{81} \right) \\ &= \frac{3}{8} \times \frac{76}{81} \\ &= \frac{19}{54} \end{aligned}$$

$$\begin{aligned} & \frac{3}{8} - \left( \frac{1}{3} \right)^3 \div \frac{1}{9} \\ &= \frac{3}{8} - \frac{1}{27} \div \frac{1}{9} \\ &= \frac{3}{8} - \frac{1}{3} \\ &= \frac{1}{24} \end{aligned}$$



# Order of Operations with Fractions (I)

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

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

Simplify each expression using the correct order of operations.

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

$$\frac{1}{2} + \left(\frac{2}{9}\right)^2 \div \frac{1}{9}$$

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

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

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

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

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

$$\frac{5}{8} \div \frac{1}{5} + \left(\frac{1}{4}\right)^2$$

$$\frac{5}{8} + \left(\frac{1}{8}\right)^2 \div \frac{1}{4}$$

# Order of Operations with Fractions (I)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \frac{1}{8} + \frac{4}{5} \times \left(\frac{1}{4}\right)^2 \\ &= \frac{1}{8} + \frac{4}{5} \times \frac{1}{16} \\ &= \frac{1}{8} + \frac{1}{20} \\ &= \frac{7}{40} \end{aligned}$$

$$\begin{aligned} & \frac{1}{2} + \left(\frac{2}{9}\right)^2 \div \frac{1}{9} \\ &= \frac{1}{2} + \frac{4}{81} \div \frac{1}{9} \\ &= \frac{1}{2} + \frac{4}{9} \\ &= \frac{17}{18} \end{aligned}$$

$$\begin{aligned} & \frac{8}{9} + \left(\frac{1}{4}\right)^2 \times \frac{2}{9} \\ &= \frac{8}{9} + \frac{1}{16} \times \frac{2}{9} \\ &= \frac{8}{9} + \frac{1}{72} \\ &= \frac{65}{72} \end{aligned}$$

$$\begin{aligned} & \left(\frac{2}{5} - \frac{2}{9}\right) \times \left(\frac{5}{8}\right)^2 \\ &= \frac{8}{45} \times \left(\frac{5}{8}\right)^2 \\ &= \frac{8}{45} \times \frac{25}{64} \\ &= \frac{5}{72} \end{aligned}$$

$$\begin{aligned} & \left(\frac{2}{3}\right)^2 + \frac{1}{8} \div \frac{1}{5} \\ &= \frac{4}{9} + \frac{1}{8} \div \frac{1}{5} \\ &= \frac{4}{9} + \frac{5}{8} \\ &= \frac{77}{72} \\ &= 1\frac{5}{72} \end{aligned}$$

$$\begin{aligned} & \left(\frac{1}{4} - \frac{2}{9}\right) \div \left(\frac{1}{2}\right)^2 \\ &= \frac{1}{36} \div \left(\frac{1}{2}\right)^2 \\ &= \frac{1}{36} \div \frac{1}{4} \\ &= \frac{1}{9} \end{aligned}$$

$$\begin{aligned} & \frac{3}{5} \div \left(\frac{7}{9} - \left(\frac{2}{3}\right)^2\right) \\ &= \frac{3}{5} \div \left(\frac{7}{9} - \frac{4}{9}\right) \\ &= \frac{3}{5} \div \frac{1}{3} \\ &= \frac{9}{5} \\ &= 1\frac{4}{5} \end{aligned}$$

$$\begin{aligned} & \frac{5}{8} \div \frac{1}{5} + \left(\frac{1}{4}\right)^2 \\ &= \frac{5}{8} \div \frac{1}{5} + \frac{1}{16} \\ &= \frac{25}{8} + \frac{1}{16} \\ &= \frac{51}{16} \\ &= 3\frac{3}{16} \end{aligned}$$

$$\begin{aligned} & \frac{5}{8} + \left(\frac{1}{8}\right)^2 \div \frac{1}{4} \\ &= \frac{5}{8} + \frac{1}{64} \div \frac{1}{4} \\ &= \frac{5}{8} + \frac{1}{16} \\ &= \frac{11}{16} \end{aligned}$$

# Order of Operations with Fractions (J)

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

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

Simplify each expression using the correct order of operations.

$$\left(\frac{5}{9}\right)^2 \div \frac{8}{9} + \frac{1}{8}$$

$$\frac{3}{8} + \frac{7}{8} \times \left(\frac{1}{3}\right)^2$$

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

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

$$\frac{8}{9} \times \frac{5}{6} - \left(\frac{2}{9}\right)^2$$

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

$$\left(\frac{7}{8} + \left(\frac{5}{8}\right)^2\right) \times \frac{7}{9}$$

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

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

# Order of Operations with Fractions (J)

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{5}{9}\right)^2 \div \frac{8}{9} + \frac{1}{8} \\ &= \frac{25}{81} \div \frac{8}{9} + \frac{1}{8} \\ &= \frac{25}{72} + \frac{1}{8} \\ &= \frac{17}{36} \end{aligned}$$

$$\begin{aligned} & \frac{3}{8} + \frac{7}{8} \times \left(\frac{1}{3}\right)^2 \\ &= \frac{3}{8} + \frac{7}{8} \times \frac{1}{9} \\ &= \frac{3}{8} + \frac{7}{72} \\ &= \frac{17}{36} \end{aligned}$$

$$\begin{aligned} & \left(\frac{7}{9} - \frac{1}{9}\right) \div \left(\frac{3}{4}\right)^2 \\ &= \frac{2}{3} \div \left(\frac{3}{4}\right)^2 \\ &= \frac{2}{3} \div \frac{9}{16} \\ &= \frac{32}{27} \\ &= 1\frac{5}{27} \end{aligned}$$

$$\begin{aligned} & \frac{4}{5} \times \left(\left(\frac{3}{4}\right)^2 - \frac{2}{5}\right) \\ &= \frac{4}{5} \times \left(\frac{9}{16} - \frac{2}{5}\right) \\ &= \frac{4}{5} \times \frac{13}{80} \\ &= \frac{13}{100} \end{aligned}$$

$$\begin{aligned} & \frac{8}{9} \times \frac{5}{6} - \left(\frac{2}{9}\right)^2 \\ &= \frac{8}{9} \times \frac{5}{6} - \frac{4}{81} \\ &= \frac{20}{27} - \frac{4}{81} \\ &= \frac{56}{81} \end{aligned}$$

$$\begin{aligned} & \frac{8}{9} \times \left(\left(\frac{3}{4}\right)^2 + \frac{2}{3}\right) \\ &= \frac{8}{9} \times \left(\frac{9}{16} + \frac{2}{3}\right) \\ &= \frac{8}{9} \times \frac{59}{48} \\ &= \frac{59}{54} \\ &= 1\frac{5}{54} \end{aligned}$$

$$\begin{aligned} & \left(\frac{7}{8} + \left(\frac{5}{8}\right)^2\right) \times \frac{7}{9} \\ &= \left(\frac{7}{8} + \frac{25}{64}\right) \times \frac{7}{9} \\ &= \frac{81}{64} \times \frac{7}{9} \\ &= \frac{63}{64} \end{aligned}$$

$$\begin{aligned} & \frac{5}{9} + \frac{2}{9} \div \left(\frac{1}{4}\right)^2 \\ &= \frac{5}{9} + \frac{2}{9} \div \frac{1}{16} \\ &= \frac{5}{9} + \frac{32}{9} \\ &= \frac{37}{9} \\ &= 4\frac{1}{9} \end{aligned}$$

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