

Order of Operations with Fractions (A)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

$$\left(\frac{3}{4}\right)^3 \times \frac{5}{9} - \frac{7}{8}$$

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

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

$$\left(\left(-\frac{1}{3}\right) - \frac{5}{6}\right)^2 \div \left(-\frac{5}{9}\right)$$

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

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Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{4}{9}\right)^2 \div \left(-\frac{4}{5}\right) - \frac{2}{3} \\ &= \frac{16}{81} \div \left(-\frac{4}{5}\right) - \frac{2}{3} \\ &= \frac{\left(-\frac{20}{81}\right) - \frac{2}{3}}{} \\ &= -\frac{74}{81} \end{aligned}$$

$$\begin{aligned} & \left(\frac{3}{4}\right)^3 \times \frac{5}{9} - \frac{7}{8} \\ &= \frac{27}{64} \times \frac{5}{9} - \frac{7}{8} \\ &= \frac{15}{64} - \frac{7}{8} \\ &= -\frac{41}{64} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{7}{8}\right) \times \left(\frac{4}{5} - \left(\frac{2}{3}\right)^2\right) \\ &= \left(-\frac{7}{8}\right) \times \left(\frac{4}{5} - \frac{4}{9}\right) \\ &= \frac{\left(-\frac{7}{8}\right) \times \frac{16}{45}}{} \\ &= -\frac{14}{45} \end{aligned}$$

$$\begin{aligned} & \left(\frac{2}{3}\right)^2 \times \left(-\frac{7}{8}\right) + \left(-\frac{2}{5}\right) \\ &= \frac{4}{9} \times \left(-\frac{7}{8}\right) + \left(-\frac{2}{5}\right) \\ &= \frac{\left(-\frac{7}{18}\right) + \left(-\frac{2}{5}\right)}{} \\ &= -\frac{71}{90} \end{aligned}$$

$$\begin{aligned} & \left(\left(-\frac{1}{3}\right) - \frac{5}{6}\right)^2 \div \left(-\frac{5}{9}\right) \\ &= \left(-\frac{7}{6}\right)^2 \div \left(-\frac{5}{9}\right) \\ &= \frac{49}{36} \div \left(-\frac{5}{9}\right) \\ &= -\frac{49}{20} \\ &= -2\frac{9}{20} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{8}{9}\right) + \frac{1}{9} \div \left(-\frac{1}{4}\right)^3 \\ &= \left(-\frac{8}{9}\right) + \frac{1}{9} \div \left(-\frac{1}{64}\right) \\ &= \frac{\left(-\frac{8}{9}\right) + \left(-\frac{64}{9}\right)}{} \\ &= -8 \end{aligned}$$

Order of Operations with Fractions (B)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

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

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

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

Order of Operations with Fractions (B)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(-\frac{2}{9}\right) \div \frac{2}{9} + \left(\frac{-1}{4}\right)^3 \\ &= \left(\frac{-2}{9}\right) \div \frac{2}{9} + \left(-\frac{1}{64}\right) \\ &= \frac{(-1)}{1} + \left(-\frac{1}{64}\right) \\ &= -\frac{65}{64} \\ &= -1\frac{1}{64} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{3}{4}\right)^2 \times \left(\frac{7}{9} - \left(-\frac{1}{5}\right)\right) \\ &= \left(\frac{-3}{4}\right)^2 \times \frac{44}{45} \\ &= \frac{9}{16} \times \frac{44}{45} \\ &= \frac{11}{20} \end{aligned}$$

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

$$\begin{aligned} & \left(\frac{2}{3}\right)^2 - \frac{1}{5} \times \frac{1}{9} \\ &= \frac{4}{9} - \frac{1}{5} \times \frac{1}{9} \\ &= \frac{4}{9} - \frac{1}{45} \\ &= \frac{19}{45} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{5}{9}\right) \times \left(-\frac{1}{2}\right) + \left(\frac{1}{3}\right)^3 \\ &= \left(\frac{-5}{9}\right) \times \left(-\frac{1}{2}\right) + \frac{1}{27} \\ &= \frac{5}{18} + \frac{1}{27} \\ &= \frac{17}{54} \end{aligned}$$

$$\begin{aligned} & \frac{1}{5} + \frac{3}{4} \div \left(\frac{5}{6}\right)^2 \\ &= \frac{1}{5} + \frac{3}{4} \div \frac{25}{36} \\ &= \frac{1}{5} + \frac{27}{25} \\ &= \frac{32}{25} \\ &= 1\frac{7}{25} \end{aligned}$$

Order of Operations with Fractions (C)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\left(-\frac{7}{9}\right) \times \frac{3}{8} - \left(\frac{5}{6}\right)^2$$

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

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

$$\frac{1}{8} \div \left(\left(-\frac{5}{6}\right)^2 + \left(-\frac{7}{9}\right)\right)$$

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

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

Order of Operations with Fractions (C)

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Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(-\frac{7}{9}\right) \times \frac{3}{8} - \frac{\left(\frac{5}{6}\right)^2}{25} \\ &= \frac{\left(-\frac{7}{9}\right) \times \frac{3}{8}}{25} - \frac{25}{36} \\ &= \frac{\left(-\frac{7}{24}\right) - \frac{25}{36}}{25} \\ &= -\frac{71}{72} \end{aligned}$$

$$\begin{aligned} & \left(\frac{2}{3}\right)^2 \div \left(\frac{\left(-\frac{2}{5}\right) - \left(-\frac{1}{2}\right)}{10}\right) \\ &= \frac{\left(\frac{2}{3}\right)^2}{10} \div \frac{1}{10} \\ &= \frac{4}{9} \div \frac{1}{10} \\ &= \frac{40}{9} \\ &= 4\frac{4}{9} \end{aligned}$$

$$\begin{aligned} & \frac{5}{8} + \frac{\left(\frac{3}{4}\right)^3}{64} \times \left(-\frac{1}{3}\right) \\ &= \frac{5}{8} + \frac{27}{64} \times \left(-\frac{1}{3}\right) \\ &= \frac{5}{8} + \left(-\frac{9}{64}\right) \\ &= \frac{31}{64} \end{aligned}$$

$$\begin{aligned} & \frac{1}{8} \div \left(\frac{\left(-\frac{5}{6}\right)^2}{36} + \left(-\frac{7}{9}\right)\right) \\ &= \frac{1}{8} \div \left(\frac{25}{36} + \left(-\frac{7}{9}\right)\right) \\ &= \frac{1}{8} \div \left(-\frac{1}{12}\right) \\ &= -\frac{3}{2} \\ &= -1\frac{1}{2} \end{aligned}$$

$$\begin{aligned} & \frac{7}{8} - \left(-\frac{7}{8}\right) \div \frac{\left(-\frac{7}{9}\right)^2}{81} \\ &= \frac{7}{8} - \left(-\frac{7}{8}\right) \div \frac{49}{81} \\ &= \frac{7}{8} - \left(-\frac{81}{56}\right) \\ &= \frac{65}{28} \\ &= 2\frac{9}{28} \end{aligned}$$

$$\begin{aligned} & \left(\frac{\left(-\frac{7}{8}\right) - \left(-\frac{5}{8}\right)}{4}\right)^2 \times \frac{1}{5} \\ &= \frac{\left(-\frac{1}{4}\right)^2}{5} \times \frac{1}{5} \\ &= \frac{1}{16} \times \frac{1}{5} \\ &= \frac{1}{80} \end{aligned}$$

Order of Operations with Fractions (D)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

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

$$\left(-\frac{5}{8}\right) + \left(-\frac{3}{4}\right)^2 \div \left(-\frac{5}{6}\right)$$

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

Order of Operations with Fractions (D)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(-\frac{1}{2}\right)^2 \div \frac{1}{8} - \left(-\frac{7}{8}\right) \\ & = \frac{1}{4} \div \frac{1}{8} - \left(-\frac{7}{8}\right) \\ & = \frac{2}{1} - \left(-\frac{7}{8}\right) \\ & = \frac{23}{8} \\ & = 2\frac{7}{8} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{7}{9}\right) - \left(-\frac{3}{4}\right) \div \left(\frac{3}{4}\right)^3 \\ & = \left(-\frac{7}{9}\right) - \left(-\frac{3}{4}\right) \div \frac{27}{64} \\ & = \left(-\frac{7}{9}\right) - \left(-\frac{16}{9}\right) \\ & = 1 \end{aligned}$$

$$\begin{aligned} & \left(\frac{1}{4}\right)^2 \times \frac{3}{5} + \left(-\frac{5}{8}\right) \\ & = \frac{1}{16} \times \frac{3}{5} + \left(-\frac{5}{8}\right) \\ & = \frac{3}{80} + \left(-\frac{5}{8}\right) \\ & = -\frac{47}{80} \end{aligned}$$

$$\begin{aligned} & \frac{5}{9} \div \left(\left(-\frac{7}{9}\right)^2 + \left(-\frac{2}{3}\right)\right) \\ & = \frac{5}{9} \div \left(\frac{49}{81} + \left(-\frac{2}{3}\right)\right) \\ & = \frac{5}{9} \div \left(-\frac{5}{81}\right) \\ & = -9 \end{aligned}$$

$$\begin{aligned} & \left(-\frac{5}{8}\right) + \left(-\frac{3}{4}\right)^2 \div \left(-\frac{5}{6}\right) \\ & = \left(-\frac{5}{8}\right) + \frac{9}{16} \div \left(-\frac{5}{6}\right) \\ & = \left(-\frac{5}{8}\right) + \left(-\frac{27}{40}\right) \\ & = -\frac{13}{10} \\ & = -1\frac{3}{10} \end{aligned}$$

$$\begin{aligned} & \left(\frac{7}{9}\right)^2 \div \left(\frac{1}{9} + \left(-\frac{7}{9}\right)\right) \\ & = \left(\frac{7}{9}\right)^2 \div \left(-\frac{2}{9}\right) \\ & = \frac{49}{81} \div \left(-\frac{2}{9}\right) \\ & = -\frac{49}{54} \end{aligned}$$

Order of Operations with Fractions (E)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\left(-\frac{2}{5}\right)^2 \div \left(-\frac{8}{9}\right) - \frac{1}{6}$$

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

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

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

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

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

Order of Operations with Fractions (E)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{-2}{5}\right)^2 \div \left(-\frac{8}{9}\right) - \frac{1}{6} \\ &= \frac{4}{25} \div \left(-\frac{8}{9}\right) - \frac{1}{6} \\ &= \frac{\left(-\frac{9}{50}\right) - \frac{1}{6}}{} \\ &= -\frac{26}{75} \end{aligned}$$

$$\begin{aligned} & \frac{5}{6} \div \left(\left(-\frac{5}{6}\right) - \left(\frac{-1}{2}\right)^2\right) \\ &= \frac{5}{6} \div \left(\left(-\frac{5}{6}\right) - \frac{1}{4}\right) \\ &= \frac{5}{6} \div \left(-\frac{13}{12}\right) \\ &= -\frac{10}{13} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{3}{4}\right) \div \left(-\frac{2}{3}\right) - \left(\frac{1}{6}\right)^2 \\ &= \frac{\left(-\frac{3}{4}\right) \div \left(-\frac{2}{3}\right) - \frac{1}{36}}{} \\ &= \frac{\frac{9}{8} - \frac{1}{36}}{} \\ &= \frac{79}{72} \\ &= 1\frac{7}{72} \end{aligned}$$

$$\begin{aligned} & \frac{\left(-\frac{3}{4}\right)^2}{} - \left(-\frac{1}{5}\right) \times \frac{1}{4} \\ &= \frac{9}{16} - \frac{\left(-\frac{1}{5}\right) \times \frac{1}{4}}{} \\ &= \frac{\frac{9}{16} - \left(-\frac{1}{20}\right)}{} \\ &= \frac{49}{80} \end{aligned}$$

$$\begin{aligned} & \frac{2}{3} \div \left(-\frac{1}{9}\right) + \left(\frac{1}{2}\right)^2 \\ &= \frac{\frac{2}{3} \div \left(-\frac{1}{9}\right) + \frac{1}{4}}{} \\ &= \frac{(-6) + \frac{1}{4}}{} \\ &= -\frac{23}{4} \\ &= -5\frac{3}{4} \end{aligned}$$

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

Order of Operations with Fractions (F)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

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

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

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

Order of Operations with Fractions (F)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(-\frac{1}{2}\right) - \left(-\frac{7}{8}\right)^2 \div \frac{1}{8} \\ &= \left(-\frac{1}{2}\right) - \frac{49}{64} \div \frac{1}{8} \\ &= \left(-\frac{1}{2}\right) - \frac{49}{8} \\ &= -\frac{53}{8} \\ &= -6\frac{5}{8} \end{aligned}$$

$$\begin{aligned} & \frac{3}{8} \times \left(\left(\frac{1}{2}\right)^2 - \left(-\frac{5}{6}\right)\right) \\ &= \frac{3}{8} \times \left(\frac{1}{4} - \left(-\frac{5}{6}\right)\right) \\ &= \frac{3}{8} \times \frac{13}{12} \\ &= \frac{13}{32} \end{aligned}$$

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

$$\begin{aligned} & \frac{3}{5} \div \left(\left(\frac{1}{4}\right)^2 + \frac{4}{5}\right) \\ &= \frac{3}{5} \div \left(\frac{1}{16} + \frac{4}{5}\right) \\ &= \frac{3}{5} \div \frac{69}{80} \\ &= \frac{16}{23} \end{aligned}$$

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

$$\begin{aligned} & \left(-\frac{3}{4}\right)^2 \div \left(-\frac{1}{4}\right) - \frac{1}{5} \\ &= \frac{9}{16} \div \left(-\frac{1}{4}\right) - \frac{1}{5} \\ &= \left(-\frac{9}{4}\right) - \frac{1}{5} \\ &= -\frac{49}{20} \\ &= -2\frac{9}{20} \end{aligned}$$

Order of Operations with Fractions (G)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

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

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

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

Order of Operations with Fractions (G)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(-\frac{1}{6}\right) \div \left(\frac{5}{9}\right)^2 - \frac{4}{5} \\ &= \left(-\frac{1}{6}\right) \div \frac{25}{81} - \frac{4}{5} \\ &= \left(-\frac{27}{50}\right) - \frac{4}{5} \\ &= -\frac{67}{50} \\ &= -1\frac{17}{50} \end{aligned}$$

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

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

$$\begin{aligned} & \frac{3}{4} \div \left(\frac{1}{2}\right)^3 - \frac{4}{9} \\ &= \frac{3}{4} \div \frac{1}{8} - \frac{4}{9} \\ &= 6 - \frac{4}{9} \\ &= \frac{50}{9} \\ &= 5\frac{5}{9} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{2}{3}\right) \div \left(\left(-\frac{7}{9}\right)^2 - \frac{2}{9}\right) \\ &= \left(-\frac{2}{3}\right) \div \left(\frac{49}{81} - \frac{2}{9}\right) \\ &= \left(-\frac{2}{3}\right) \div \frac{31}{81} \\ &= -\frac{54}{31} \\ &= -1\frac{23}{31} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{1}{9}\right) \times \frac{3}{8} + \left(-\frac{1}{4}\right)^2 \\ &= \left(-\frac{1}{9}\right) \times \frac{3}{8} + \frac{1}{16} \\ &= \left(-\frac{1}{24}\right) + \frac{1}{16} \\ &= \frac{1}{48} \end{aligned}$$

Order of Operations with Fractions (H)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

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

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

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

Order of Operations with Fractions (H)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{1}{3} \right)^2 - \frac{8}{9} \div \left(-\frac{5}{8} \right) \\ & = \left(\frac{1}{9} - \frac{8}{9} \right) \div \left(-\frac{5}{8} \right) \\ & = \left(-\frac{7}{9} \right) \div \left(-\frac{5}{8} \right) \\ & = \frac{56}{45} \\ & = 1 \frac{11}{45} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{5}{6} \right) \times \left(\left(\frac{1}{2} \right)^2 - \frac{4}{5} \right) \\ & = \left(-\frac{5}{6} \right) \times \left(\frac{1}{4} - \frac{4}{5} \right) \\ & = \left(-\frac{5}{6} \right) \times \left(-\frac{11}{20} \right) \\ & = \frac{11}{24} \end{aligned}$$

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

$$\begin{aligned} & \left(-\frac{5}{9} \right)^2 + \left(-\frac{1}{9} \right) \times \left(-\frac{7}{9} \right) \\ & = \frac{25}{81} + \left(-\frac{1}{9} \right) \times \left(-\frac{7}{9} \right) \\ & = \frac{25}{81} + \frac{7}{81} \\ & = \frac{32}{81} \end{aligned}$$

$$\begin{aligned} & \frac{1}{3} \times \left(-\frac{5}{9} \right) + \left(\frac{4}{9} \right)^2 \\ & = \frac{1}{3} \times \left(-\frac{5}{9} \right) + \frac{16}{81} \\ & = \left(-\frac{5}{27} \right) + \frac{16}{81} \\ & = \frac{1}{81} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{2}{5} \right) \times \left(\frac{5}{6} + \left(\frac{1}{3} \right)^2 \right) \\ & = \left(-\frac{2}{5} \right) \times \left(\frac{5}{6} + \frac{1}{9} \right) \\ & = \left(-\frac{2}{5} \right) \times \frac{17}{18} \\ & = -\frac{17}{45} \end{aligned}$$

Order of Operations with Fractions (I)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

$$\left(\left(\frac{5}{6}\right)^2 - \left(-\frac{7}{9}\right)\right) \div \left(-\frac{5}{6}\right)$$

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

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

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Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{1}{2}\right)^2 + \frac{2}{9} \times \left(-\frac{1}{4}\right) \\ &= \frac{1}{4} + \frac{2}{9} \times \left(-\frac{1}{4}\right) \\ &= \frac{1}{4} + \left(-\frac{1}{18}\right) \\ &= \frac{7}{36} \end{aligned}$$

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

$$\begin{aligned} & \left(-\frac{1}{3}\right) - \left(-\frac{4}{5}\right) \times \left(\frac{1}{3}\right)^2 \\ &= \left(-\frac{1}{3}\right) - \left(-\frac{4}{5}\right) \times \frac{1}{9} \\ &= \left(-\frac{1}{3}\right) - \left(-\frac{4}{45}\right) \\ &= -\frac{11}{45} \end{aligned}$$

$$\begin{aligned} & \left(\left(\frac{5}{6}\right)^2 - \left(-\frac{7}{9}\right)\right) \div \left(-\frac{5}{6}\right) \\ &= \left(\frac{25}{36} - \left(-\frac{7}{9}\right)\right) \div \left(-\frac{5}{6}\right) \\ &= \frac{53}{36} \div \left(-\frac{5}{6}\right) \\ &= -\frac{53}{30} \\ &= -1\frac{23}{30} \end{aligned}$$

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

$$\begin{aligned} & \left(-\frac{1}{2}\right)^2 + \left(-\frac{7}{8}\right) \div \frac{3}{4} \\ &= \frac{1}{4} + \left(-\frac{7}{8}\right) \div \frac{3}{4} \\ &= \frac{1}{4} + \left(-\frac{7}{6}\right) \\ &= -\frac{11}{12} \end{aligned}$$

Order of Operations with Fractions (J)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

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

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

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

Order of Operations with Fractions (J)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \frac{1}{9} + \left(\frac{1}{2}\right)^3 \div \frac{1}{3} \\ &= \frac{1}{9} + \frac{1}{8} \div \frac{1}{3} \\ &= \frac{1}{9} + \frac{3}{8} \\ &= \frac{35}{72} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{5}{6}\right) \div \frac{3}{5} + \left(-\frac{2}{3}\right)^2 \\ &= \left(-\frac{5}{6}\right) \div \frac{3}{5} + \frac{4}{9} \\ &= \left(-\frac{25}{18}\right) + \frac{4}{9} \\ &= -\frac{17}{18} \end{aligned}$$

$$\begin{aligned} & \left(\frac{3}{4}\right)^2 - \frac{1}{8} \div \left(-\frac{1}{3}\right) \\ &= \left(\frac{9}{16} - \frac{1}{8}\right) \div \left(-\frac{1}{3}\right) \\ &= \frac{7}{16} \div \left(-\frac{1}{3}\right) \\ &= -\frac{21}{16} \\ &= -1\frac{5}{16} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{7}{9}\right) \div \left(\frac{1}{2}\right)^3 - \left(-\frac{5}{9}\right) \\ &= \left(-\frac{7}{9}\right) \div \frac{1}{8} - \left(-\frac{5}{9}\right) \\ &= \left(-\frac{56}{9}\right) - \left(-\frac{5}{9}\right) \\ &= -\frac{17}{3} \\ &= -5\frac{2}{3} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{1}{3}\right) + \left(-\frac{1}{2}\right)^3 \times \frac{7}{9} \\ &= \left(-\frac{1}{3}\right) + \left(-\frac{1}{8}\right) \times \frac{7}{9} \\ &= \left(-\frac{1}{3}\right) + \left(-\frac{7}{72}\right) \\ &= -\frac{31}{72} \end{aligned}$$

$$\begin{aligned} & \left(\left(-\frac{5}{6}\right) + \left(-\frac{1}{2}\right)\right)^2 \div \left(-\frac{1}{4}\right) \\ &= \left(-\frac{4}{3}\right)^2 \div \left(-\frac{1}{4}\right) \\ &= \frac{16}{9} \div \left(-\frac{1}{4}\right) \\ &= -\frac{64}{9} \\ &= -7\frac{1}{9} \end{aligned}$$