Order of Operations with Fractions (D)

Name:

Date:

Simplify each expression using the correct order of operations.

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

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

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

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

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

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

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Simplify each expression using the correct order of operations.

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

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

$$= \left(-\frac{7}{9}\right) - \left(-\frac{3}{4}\right) \div \frac{27}{64}$$

$$= \left(-\frac{7}{9}\right) - \left(-\frac{16}{9}\right)$$

$$= 1$$

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

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

$$= \frac{5}{9} \div \left(\frac{49}{81} + \left(-\frac{2}{3} \right) \right)$$

$$= \frac{5}{9} \div \left(-\frac{5}{81} \right)$$

$$= -9$$

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

$$= \left(-\frac{5}{8}\right) + \frac{9}{16} \div \left(-\frac{5}{6}\right)$$

$$= \left(-\frac{5}{8}\right) + \left(-\frac{27}{40}\right)$$

$$= -\frac{13}{10}$$

$$= -1\frac{3}{10}$$

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

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

$$= \frac{49}{81} \div \left(-\frac{2}{3}\right)$$

$$= -\frac{49}{54}$$