

Order of Operations with Fractions (A)

Name: _____

Date: _____

Solve each expression using the correct order of operations.

$$\begin{aligned} & \left(\frac{3}{5} - \frac{1}{6}\right) \div \left(-\frac{1}{3}\right) \\ & = \left(\frac{18}{30} - \frac{5}{30}\right) \times \left(\frac{-3}{1}\right) \\ & = \frac{13}{30} \times \frac{-3}{1} = \frac{-13}{10} = -1\frac{3}{10} \end{aligned}$$

$$\begin{aligned} & \left(\left(-\frac{1}{3}\right) + \frac{5}{8}\right) \div \frac{8}{9} \\ & = \left(-\frac{8}{24} + \frac{15}{24}\right) \times \frac{9}{8} \\ & = \frac{7}{24} \times \frac{9}{8} = \frac{21}{64} \end{aligned}$$

$$\begin{aligned} & \left(\left(-\frac{1}{6}\right) - \left(-\frac{5}{8}\right)\right) \times \frac{1}{2} \\ & = \left(-\frac{4}{24} + \frac{15}{24}\right) \times \frac{1}{2} \\ & = \frac{11}{24} \times \frac{1}{2} = \frac{11}{48} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{1}{2}\right) - \left(-\frac{1}{5}\right)^2 \\ & = \left(-\frac{1}{2}\right) - \left(\frac{1}{25}\right) \\ & = \frac{-25}{50} - \frac{2}{50} = \frac{-27}{50} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{2}{9}\right) \times \left(\left(-\frac{5}{9}\right) + \frac{5}{6}\right) \\ & = \left(-\frac{2}{9}\right) \times \left(-\frac{10}{18} + \frac{15}{18}\right) \\ & = \frac{-2}{9} \times \frac{5}{18} = \frac{-5}{81} \end{aligned}$$

$$\begin{aligned} & \left(-\frac{1}{8}\right) \times \left(\frac{2}{3}\right) + \frac{5}{6} \\ & = \frac{-1}{8} \times \frac{2}{3} + \frac{5}{6} \\ & = \frac{1}{12} + \frac{10}{12} \\ & = \frac{11}{12} \end{aligned}$$

Order of Operations with Fractions (B)

Name: _____

Date: _____

Solve each expression using the correct order of operations.

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

$$= \frac{-2}{2} \times \frac{8}{9}$$

$$= \frac{-8}{9}$$

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

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

$$= \frac{4}{5} - \frac{3}{2} = \frac{8}{10} - \frac{15}{10} = \boxed{\frac{-7}{10}}$$

$$\frac{4}{9} \div \left(\frac{7}{8} - \frac{8}{9}\right)$$

$$= \frac{4}{9} \div \left(\frac{63}{72} - \frac{64}{72}\right)$$

$$= \frac{4}{9} \times \frac{72}{-1} = -32$$

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

$$= \frac{-3}{8} \times \frac{25}{36} = \frac{-25}{96}$$

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

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

$$= \frac{-6}{7} + \frac{1}{3} = \frac{-18}{21} + \frac{7}{21}$$

$$= \boxed{\frac{-11}{21}}$$

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

$$= \frac{4}{25} \times \frac{5}{-3}$$

$$= \frac{-4}{15}$$

Order of Operations with Decimals (A)

Name: _____

Date: _____

Solve each expression using the correct order of operations.

$$(-7.5)^2 + (-5.3) \times (-1.9)$$

$$56.25 + 10.07$$

$$= 66.32$$

$$2.8 \times (5.6) - (-7.5)^2$$

$$= -15.68 - 56.25$$

$$= -71.93$$

$$(-4.7)^2 + 8.5 \times (-9.6)$$

$$= 22.09 - 81.6$$

$$= -59.51$$

$$(8.2 + (-1.9))^2 \div (-2.7)$$

$$= (6.3)^2 \div (-2.7)$$

$$= 39.69 \div (-2.7) = -14.7$$

$$(-5.4) - (-4.6)^2 \times (-2.5)$$

$$-5.4 - (21.16) \times (-2.5)$$

$$= -5.4 - (-52.9) = -5.4 + 52.9$$

$$= 47.5$$

$$(3.9)^2 - 5.7 \times 7.8$$

$$= 15.21 - 44.46$$

$$= -29.25$$

$$6.7 \times (-4.1) - (0.5)^2$$

$$= -27.47 - 0.25$$

$$= -27.72$$

$$(-1.6)^2 - (-6.7) \times (-8.8)$$

$$= 2.56 - 58.96$$

$$= -56.4$$

$$(-3.7) \times (-2.9) - (-9.4)^2$$

$$= 10.73 - 88.36$$

$$= -77.63$$

$$(-7.6) \times (-4.5) + (-1.7)^2$$

$$= 34.2 + 2.89$$

$$= 37.09$$

Order of Operations with Decimals (B)

Name: _____

Date: _____

Solve each expression using the correct order of operations.

$$\begin{aligned} & (-6.5) + (1.1)^2 \div (-2.2) \\ &= -6.5 + 1.21 \div (-2.2) \\ &= -6.5 - 0.55 \\ &= -7.05 \end{aligned}$$

$$\begin{aligned} & ((-4.4)^2 - (-2.1)) \times 2.5 \\ &= (19.36 + 2.1) \times 2.5 \\ &= 21.46 \times 2.5 = 53.65 \end{aligned}$$

$$\begin{aligned} & (-7.4) - (8.1)^2 \div 1.5 \\ &= -7.4 - 65.61 \div 1.5 \\ &= -7.4 - 43.74 = -51.14 \end{aligned}$$

$$\begin{aligned} & (4.3)^2 - (-3.3) \times (-8.2) \\ &= 18.49 - 27.06 \\ &= -8.57 \end{aligned}$$

$$\begin{aligned} & (-6.3)^2 + 0.8 \times 5.5 \\ &= 39.69 + 4.4 \\ &= 44.09 \end{aligned}$$

$$\begin{aligned} & (-1.7)^2 + 4.7 \times 9.7 \\ &= 2.89 + 45.59 \\ &= 48.48 \end{aligned}$$

$$\begin{aligned} & 6.2 \times 5.6 + (-2.5)^2 \\ &= 34.72 + 6.25 \\ &= 40.97 \end{aligned}$$

$$\begin{aligned} & (-2.3) \times 0.6 - (9.3)^2 \\ &= -1.38 - 86.49 \\ &= -87.87 \end{aligned}$$

$$\begin{aligned} & (7.1)^2 - 2.1 \times 8.2 \\ &= 50.41 - 17.22 \\ &= 33.19 \end{aligned}$$

$$\begin{aligned} & (0.1 + (-3.7)^2) \div (-3.5) \\ &= (0.1 + 13.69) \div (-3.5) \\ &= 13.79 \div (-3.5) = -3.94 \end{aligned}$$