

Center #1 – Write the decimal as a fraction or mixed number in simplest form

1) -0.6

2) 0.35

3) -5.8

Write the rational number as a decimal

4) $\frac{11}{5}$

5) $-\frac{5}{8}$

6) $-1\frac{8}{15}$

Center #2 – Add or subtract. Write the fractions in simplest form.

1) $-\frac{7}{2} + \frac{5}{4}$

2) $-4\frac{5}{9} + \frac{8}{9}$

3) $1.6 + (-2.76)$

4) $-\frac{5}{12} - \frac{3}{10}$

5) $3.8 - (-7.45)$

6) $3\frac{3}{4} - \frac{7}{8}$

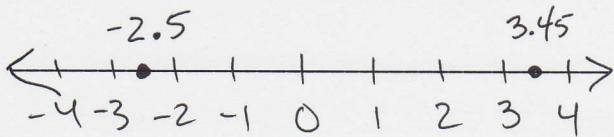
Center #3 – Evaluate the expression if $x = \frac{2}{3}$ and $y = -\frac{5}{2}$

1) $x + y$

2) $2x - y$

3) $-x + |2y|$

Find the distance between the two numbers on the number line.



Center #4 – Multiply or divide. Write the fractions in simplest form.

$$1) \quad \frac{8}{15} \times -\frac{2}{3}$$

$$2) \quad -\frac{2}{3} \bullet 2\frac{1}{2} \bullet -3$$

$$3) \quad 5.12(-9.3)$$

$$4) \quad \frac{9}{10} \div \left(-1\frac{1}{5} \right)$$

$$5) \quad -0.65 \div 0.4$$

$$6) \quad -2.7 \div \left(-\frac{1}{4} \right)^2$$

Center #5

John's kite is 155 feet up in the air. Your kite is $\frac{3}{5}$ as high as John's. How much higher is John's kite than yours?

A bottle holds 16.9 fluid ounces of water. You take a gulp from a new bottle and now it's $\frac{4}{5}$ full. How many fluid ounces did you drink?

Center #6

The change in scoring for the last 6 games is 4.7, -3.2, -6.1, -10.9, 1.5, and -0.1. What is the mean change?

How many $\frac{2}{5}$ liter cups can you fully fill with $5\frac{7}{10}$ liters of soda?

Center #1 – Write the decimal as a fraction or mixed number in simplest form

1) -0.6

$$-\frac{6}{10} = -\frac{3}{5}$$

2) 0.35

$$\frac{35}{100} = \frac{7}{20}$$

3) -5.8

$$-\frac{58}{10} = -5\frac{4}{5}$$

Write the rational number as a decimal

4) $\frac{11}{5}$

$$2\frac{1}{5} = 2.2$$

5) $-\frac{5}{8}$

$$\begin{array}{r} -0.625 \\ 8 \overline{) 5.000} \\ -48 \\ \hline 20 \\ -16 \\ \hline 40 \end{array}$$

6) $-1\frac{8}{15}$

$$-1.\bar{53}$$

$$\begin{array}{r} .53333... \\ 15 \overline{) 8.0} \\ -75 \\ \hline 50 \\ -45 \\ \hline 50 \end{array}$$

Center #2 – Add or subtract. Write the fractions in simplest form.

1) $-\frac{7}{2} + \frac{5}{4}$

$$\begin{aligned} -\frac{14}{4} + \frac{5}{4} &= -\frac{9}{4} \\ &= -2\frac{1}{4} \end{aligned}$$

2) $-4\frac{5}{9} + \frac{8}{9}$

$$\begin{aligned} -3\frac{4}{9} + \frac{8}{9} &= -3\frac{6}{9} = -3\frac{2}{3} \\ \text{OR} \\ -\frac{41}{9} + \frac{8}{9} &= -\frac{33}{9} = -3\frac{6}{9} = -3\frac{2}{3} \end{aligned}$$

3) $1.6 + (-2.76)$

$$\begin{array}{r} 2.76 \\ -1.60 \\ \hline -1.16 \end{array}$$

4) $-\frac{5}{12} - \frac{3}{10}$

$$-\frac{25}{60} + -\frac{18}{60} = -\frac{43}{60}$$

5) $3.8 - (-7.45)$

$$\begin{array}{r} 3.8 \\ +7.45 \\ \hline 11.25 \end{array}$$

6) $3\frac{3}{4} - \frac{7}{8}$

$$\begin{array}{r} 3\frac{6}{8} - \frac{7}{8} \\ 2\frac{14}{8} - \frac{7}{8} = 2\frac{7}{8} \end{array}$$

Center #3 – Evaluate the expression if $x = \frac{2}{3}$ and $y = -\frac{5}{2}$

1) $x + y$

$$\begin{aligned} \frac{2}{3} + -\frac{5}{2} \\ \frac{4}{6} + -\frac{15}{6} \\ -\frac{11}{6} = -1\frac{5}{6} \end{aligned}$$

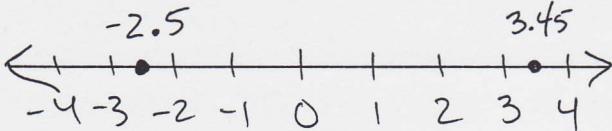
2) $2x - y$

$$\begin{aligned} 2\left(\frac{2}{3}\right) - \left(-\frac{5}{2}\right) \\ \frac{4}{3} + \frac{5}{2} \\ \frac{8}{6} + \frac{15}{6} = \frac{23}{6} \\ = 3\frac{5}{6} \end{aligned}$$

3) $-x + |2y|$

$$\begin{aligned} -\frac{2}{3} + \left|8 \cdot -\frac{5}{2}\right| \\ -\frac{2}{3} + 5 = 4\frac{1}{3} \end{aligned}$$

Find the distance between the two numbers on the number line.



$$3.45 - (-2.5) \Rightarrow \begin{array}{r} 3.45 \\ +2.5 \\ \hline 5.95 \end{array}$$

Center #4 – Multiply or divide. Write the fractions in simplest form.

1) $\frac{8}{15} \times -\frac{2}{3}$

$$-\frac{16}{45}$$

2) $-\frac{2}{3} \cdot 2\frac{1}{2} \cdot -3$

$$-\frac{2}{3} \cdot \frac{5}{2}$$

$$\cancel{\frac{2}{3}} \cdot \cancel{\frac{5}{2}} = 5$$

3) $5.12(-9.3)$

$$-47.616$$

4) $\frac{9}{10} \div \left(-1\frac{1}{5}\right)$

$$\frac{9}{10} \div \frac{6}{5}$$

$$\frac{3}{2} \frac{x}{10} \cdot \frac{5}{6} = \frac{3}{4}$$

5) $-0.65 \div 0.4$

$$0.4 \overline{)0.65}$$

$$4 \overline{)6.5}$$

6) $-2.7 \div \left(-\frac{1}{4}\right)^2$

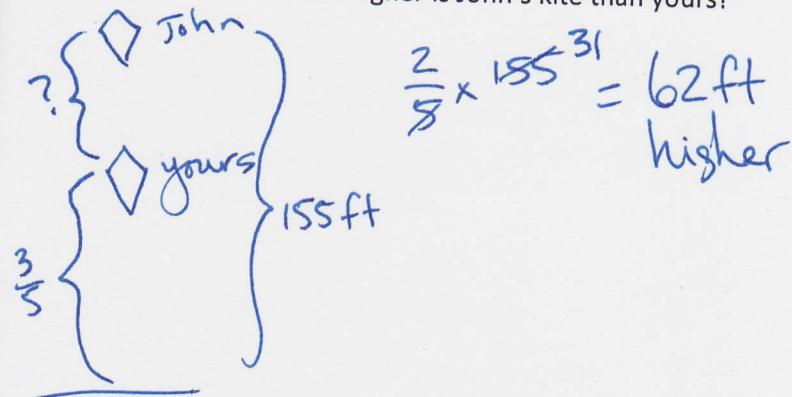
$$-2.7 \div \frac{1}{16}$$

$$-2\frac{7}{10} \cdot \frac{16}{1}$$

$$-\frac{27}{10} \cdot \frac{16}{1} = -\frac{216}{5} = -43\frac{1}{5}$$

Center #5

John's kite is 155 feet up in the air. Your kite is $\frac{3}{5}$ as high as John's. How much higher is John's kite than yours?



A bottle holds 16.9 fluid ounces of water. You take a gulp from a new bottle and now it's $\frac{4}{5}$ full. How many fluid ounces did you drink?

You drank $\frac{1}{5}$ of 16.9

$$\frac{1}{5} \times 16\frac{9}{10}$$

$$\frac{1}{5} \times \frac{169}{10} = \frac{169}{50} = 3\frac{19}{50} \text{ fl. oz.}$$

Center #6

The change in scoring for the last 6 games is 4.7, -3.2, -6.1, -10.9, 1.5, and -0.1. What is the mean change?

$$4.7 + -3.2 + -6.1 + -10.9 + 1.5 + -0.1$$

$$-14.1 \div 6 = -2.35 \text{ pts}$$

How many $\frac{2}{5}$ liter cups can you fully fill with $5\frac{7}{10}$ liters of soda?

$$5\frac{7}{10} \div \frac{2}{5}$$

$$2\frac{57}{10} \cdot \frac{5}{2} = \frac{57}{4} = 14\frac{1}{4}$$

14 cups