

Station #1

Write the fraction as a decimal or the decimal as a fraction. (Put answer in simplest form)

1. $0.25 = \frac{25}{100} = \boxed{\frac{1}{4}}$ Both the numerator and denominator can be divided by 25 so it's simplified to $\frac{1}{4}$

2. $\frac{3}{8} = 3 \div 8 = 8 \overline{)3.0} = 8 \overline{)3.0} = \boxed{0.375}$

$$\begin{array}{r} 375 \\ 8 \overline{)3.0} \\ \underline{-24} \\ 60 \\ \underline{-56} \\ 40 \end{array}$$

3. $0.60 = \frac{60}{100} = \boxed{\frac{3}{5}}$

Both the numerator and denominator can be divided by 20 so that is why it can be simplified to $\frac{3}{5}$

Station # 2

Round to the nearest underlined number.

1) $3,486.251 = \boxed{3,490.000}$ (The number to the right is greater than 5 so the underlined number increases by 1)

2) $0.0249 = \boxed{0.0200}$

3) $14.3596 = \boxed{14.3600}$ The number to the right is 5 or greater so the underlined number goes up and since that would be 10, we carry over

→ The number to the right is less than 5 so the underlined number stays the same

Station #3

Divide. Reduce to lowest terms.

$$\boxed{1} \quad \frac{1}{2} \div \frac{4}{5} = \frac{1}{2} \times \frac{5}{4} = \boxed{\frac{5}{8}}$$

$$\boxed{2} \quad 5 \div \frac{2}{3} = \frac{5}{1} \times \frac{3}{2} = \frac{15}{2} = \boxed{7\frac{1}{2}}$$

Change to a mixed fraction
fraction — whole #

This becomes the denominator $\rightarrow 2 \overline{)15}$
 $\frac{14}{1}$ ← the remainder becomes the numerator

Station #4

Worksheet #28

Real Numbers: Multiplying and Dividing

Find the product.

1 $(3)(-6)$

positive times a negative = negative
 $3 \times -6 = \boxed{-18}$

2 $(-2)(-7)$

negative times a negative = positive
 $(-2) \times (-7) = \boxed{14}$

3 $-1 \cdot 15$

negative times a positive = negative
 $-1 \times 15 = \boxed{-15}$

Station
#5

Multiply. Reduce to lowest terms.

$$\boxed{1} \quad -\frac{1}{2} \times \frac{3}{4} = \frac{-1 \times 3}{2 \times 4} = \boxed{-\frac{3}{8}}$$

$$\boxed{2} \quad \left(\frac{5}{9}\right) \left(\frac{3}{10}\right) = \frac{5 \cdot 3}{9 \cdot 10} = \frac{15}{90} = \boxed{\frac{1}{6}}$$

$$\boxed{3} \quad -\frac{15}{4} \cdot -\frac{12}{5} = \frac{-15 \cdot -12}{4 \cdot 5} = \frac{180}{20} = \boxed{9}$$

$$\boxed{4} \quad \left(2 \frac{1}{2}\right) \left(3 \frac{1}{5}\right) = \frac{5}{2} \cdot \frac{16}{5} = \frac{5 \cdot 16}{2 \cdot 5} = \frac{80}{10} = \boxed{8}$$

↙

$$\frac{2 \times 2 + 1}{2}$$

↓

$$\frac{3 \times 5 + 1}{5}$$

Station #6

Add or subtract as indicated. Reduce to lowest terms.

1 $2\frac{2}{3} - \frac{1}{3} = \frac{8}{3} + (-\frac{1}{3}) = \frac{8+(-1)}{3} = \frac{7}{3} = \boxed{2\frac{1}{3}}$

$\frac{3 \times 2 + 2}{3} = \frac{8}{3}$

2 $6\frac{1}{2} - (-3)$

$\frac{2 \times 6 + 1}{2} = \frac{13}{2} - (-\frac{3}{1}) = \frac{13}{2} - (-\frac{6}{2}) = \frac{13}{2} + (\frac{6}{2}) = \frac{19}{2}$

$\begin{array}{r} 3 \overline{) 17} \\ \underline{6} \\ 11 \end{array}$
denominator ← numerator

3 $2\frac{1}{2} - 1\frac{3}{4}$

$\frac{2 \times 2 + 1}{4} = \frac{5}{4}$

$\frac{1 \times 4 + 3}{4} = \frac{7}{4}$

$\boxed{9}$

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

Station # 8

Worksheet #27

Real Numbers: Adding & Subtracting

Find the sum or difference as indicated.

$$1 \quad 7 - (-4) = 7 + (+4) = \boxed{11}$$

$$2 \quad -5 - 5 = -5 + -5 = \boxed{-10}$$

$$3 \quad -23 - 6 = -23 + -6 = \boxed{-29}$$

station #9

Add or subtract as indicated. Reduce to lowest terms.

$$\boxed{1} \quad 1\frac{1}{3} + 2\frac{1}{3} = \frac{4}{3} + \frac{7}{3} = \frac{11}{3} = \boxed{3\frac{2}{3}}$$

$$\frac{1 \times 3 + 1}{3} = \frac{4}{3} \quad \downarrow \quad \frac{2 \times 3 + 1}{3} = \frac{7}{3} \quad \downarrow \quad 3 \overline{)11}$$

$$\frac{31}{8} + \frac{-13}{8} = \frac{18}{8}$$

$$\boxed{2} \quad 3\frac{7}{8} + -1\frac{5}{8}$$

$$\frac{8 \times 3 + 7}{8} = \frac{31}{8} \quad \frac{8 \times 1 + 5}{8} = \frac{-5}{8} \quad \frac{31}{8} - \frac{5}{8} = \frac{26}{8} = \frac{13}{4}$$

$$\begin{array}{r} 2 \\ 8 \overline{)18} \\ \underline{-16} \\ 2 \end{array} = 2\frac{2}{8} = \boxed{2\frac{1}{4}}$$

$$\boxed{3} \quad 22\frac{16}{17} + 4 = \frac{390}{17} + \frac{4}{1} = \frac{390}{17} + \frac{68}{17} = \frac{458}{17}$$

$$\frac{22 \times 17 + 16}{17} = \frac{390}{17}$$

$$\frac{4 \cdot 17}{1 \cdot 17}$$

$$\downarrow \quad \boxed{26\frac{16}{17}}$$

Station #10

Worksheet #21

Percents Problems

$$\frac{\text{part}}{\text{whole}} = \frac{\text{percent}}{100}$$

Solve.

1 What is ^{percent} 12% of ^{whole} 200? → Looking for the part

$$\frac{x}{200} = \frac{12}{100}$$
$$\frac{x(100)}{100} = \frac{12(200)}{100}$$

$$x = 24$$

2 ^{percent} 15% of what amount is ^{part} 60

$$\frac{60}{x} = \frac{15}{100}$$

3 ^{part} 30 is ^{percent} 70% of what number?

$$\frac{30(100)}{15} = \frac{x(15)}{15}$$

$$x = 400$$

$$\frac{30}{x} = \frac{70}{100} = \frac{30(100)}{70} = \frac{70(x)}{70}$$

42.86

$$42.86 = x$$

↑
rounded answer

Station # 11

Find the quotient. Simplify.

1 $-16 \div (-8)$

negative \div negative = positive
 $-16 \div -8 = \boxed{2}$

2 $-9 \div 9$

negative \div positive = negative
 $-9 \div 9 = \boxed{-1}$

3 $-100 \div 10$

negative \div positive = negative
 $-100 \div 10 = \boxed{-10}$