

Get out your homework and grab a packet off the front table and begin warming up by working on the 1st section over adding and subtracting integers.

Classwork - Quiz 2 Review

QUIZ TOMORROW!!!

1) Compare the following rational numbers using  $<$ ,  $>$ , or  $=$ .

A)  $\frac{12}{15} < \frac{5}{6}$

$\frac{12}{15} = \frac{2 \cdot 6}{3 \cdot 5} = \frac{2}{3}$

$\frac{5}{6} = \frac{5}{6}$

B)  $\frac{4}{7} > -5\frac{5}{4}$

$\frac{4}{7} = 4 \cdot \frac{1}{7}$

$-5\frac{5}{4} = -5\frac{3 \cdot 7}{4 \cdot 7} = -5\frac{21}{28}$

C)  $\frac{8}{9} > 0.88\overline{00}$

$0.88\overline{00} = 0.88 + 0.00\overline{00}$

$0.88\overline{00} = 0.88 + \frac{0}{9} = 0.88$

$0.88\overline{00} = \frac{88}{100} = \frac{22}{25} = \frac{176}{300}$

$0.88\overline{00} = 0.88 + 0.00\overline{00} = 0.88 + \frac{0}{9} = 0.88$

$0.88\overline{00} = \frac{88}{100} = \frac{22}{25} = \frac{176}{300}$

2) Write the following improper fractions as mixed numbers.

A)  $\frac{8}{5} = 1\frac{3}{5}$

B)  $\frac{17}{4} = 4\frac{1}{4}$

C)  $-\frac{21}{6} = -3\frac{1}{2}$

D)  $2\frac{5}{3} = 3\frac{2}{3}$

E)  $-7\frac{3}{2} = -8\frac{1}{2}$

$-3\frac{3}{6} = -3\frac{1}{2}$

3) Write the following mixed numbers as improper fractions.

A)  $2\frac{4}{5} = \frac{14}{5}$

B)  $7\frac{1}{3} = \frac{22}{3}$

C)  $-5\frac{5}{6} = \frac{-35}{6}$

D)  $-8\frac{2}{7} = \frac{-58}{7}$

4) Add or subtract. Write answer in simplest form. SHOW WORK

A)  $\frac{3 \cdot 1}{3 \cdot 8} + \left(-\frac{5}{6}\right) \cdot 4$

$$\frac{3}{24} + \left(-\frac{20}{24}\right) = \frac{-17}{24}$$

B)  $\frac{4 \cdot 3}{4 \cdot 5} - \left(-\frac{3}{4}\right) \cdot 5$

$$-\frac{12}{20} - \left(-\frac{15}{20}\right) = \frac{3}{20}$$

C)  $5\frac{4}{7} + 8\frac{1}{2} \cdot 2$

$$5\frac{8}{14} + 8\frac{7}{14} = 13\frac{15}{14} = 14\frac{1}{14}$$

D)  $9\frac{1}{3} \cdot 2 - 4\frac{5}{6}$

$$9\frac{2}{6} - 4\frac{5}{6} = 5\frac{1}{6}$$

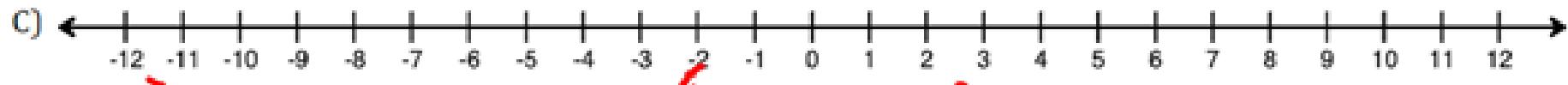
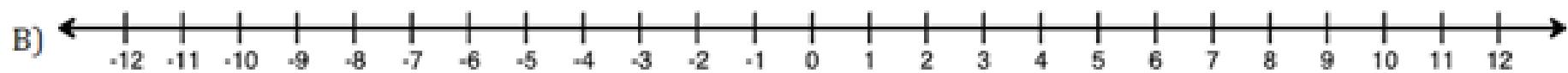
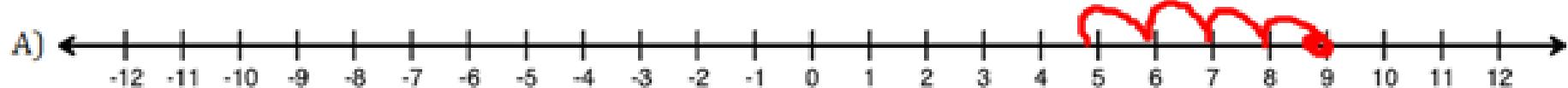
$$8\frac{8}{6} - 4\frac{5}{6} = 4\frac{3}{6} = 4\frac{1}{2}$$

1) Find the answers for the following subtraction problems. Use a number line or +/- chips to show your work.  
If you choose to use number lines, use the ones below. If you use chips, draw them under the problem.

A)  $9 + (-4) = \underline{5}$

B)  $-6 - 6 = \underline{-12}$

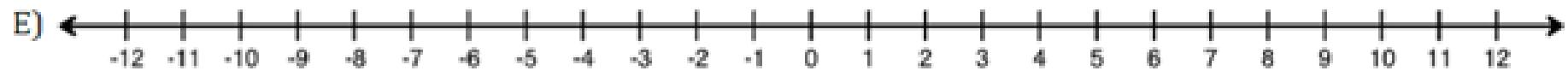
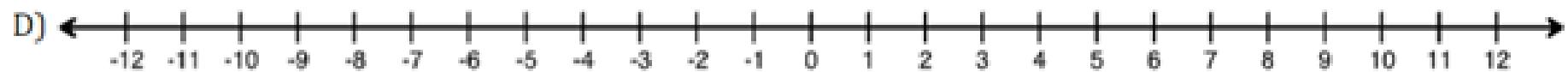
C)  $-3 + 5 = \underline{2}$



D)  $5 - (-7) = \underline{12}$

E)  $-4 + (-4) = \underline{-8}$

F)  $3 - 12 = \underline{-9}$



2) Write each decimal as a fraction or mixed number in simplest form. SHOW WORK

A)  $0.8 = \underline{\frac{4}{5}}$

$$\frac{8 \div 2}{10 \div 2} = \frac{4}{5}$$

B)  $6.24 = \underline{6 \frac{6}{25}}$

$$\frac{24 \div 4}{100 \div 4} = \frac{6}{25}$$

C)  $8.11 = \underline{\quad}$

D)  $-0.64 = \underline{\quad}$

E)  $10.4 = \underline{\quad}$

F)  $-5.06 = \underline{\quad}$

3) Find the decimal value of each fraction by either using long division or making the denominator a power of 10. Put your answer in the space provided and then CIRCLE whether the decimal is terminating or repeating.  
SHOW WORK

A)  $\frac{8}{9} = \underline{\underline{0.8}}$

Circle One → Terminating or Repeating

Handwritten long division of 8 by 9. The quotient is 0.888... with a bar over the 8, indicating it is a repeating decimal. The divisor 9 is written above the first digit of the dividend 8. The remainder 8 is shown at the bottom.

C)  $1\frac{3}{8} = \underline{\underline{\quad}}$

Circle One → Terminating or Repeating

B)  $2\frac{2}{5} = \underline{\underline{2.4}}$

Circle One → Terminating or Repeating

Handwritten conversion of  $2\frac{2}{5}$  to a decimal. It shows  $2\frac{2}{5} = \frac{4}{10}$ . The fraction  $\frac{4}{10}$  is simplified to  $\frac{2}{5}$ , which is then converted to the decimal 0.4.

D)  $-\frac{7}{11} = \underline{\underline{\quad}}$

Circle One → Terminating or Repeating

E)  $4\frac{5}{16} =$  \_\_\_\_\_

**Circle One** → Terminating or Repeating

F)  $\frac{11}{12} =$  \_\_\_\_\_

**Circle One** → Terminating or Repeating

4) Compare the following rational numbers using  $<$ ,  $>$ , or  $=$ .

A)  $\frac{7}{10}$  \_\_\_\_\_  $\frac{3}{5}$

B)  $\frac{4}{7}$  \_\_\_\_\_  $\frac{2}{3}$

C)  $3\frac{5}{12}$  \_\_\_\_\_  $3\frac{7}{10}$

5) Order the set of numbers from least to greatest.

$$(90\%, 0.809, \frac{8}{9}, 0.89)$$

$$\sqrt[4]{8.1} = 0.\overline{8888}\dots$$

$$90\% = 0.9$$

$$0.809, \frac{8}{9}, 0.89, 90\%$$

6) Solve the following addition and subtraction problems. Use the number line below to help answer the problems. SHOW WORK!



A)  $\frac{1}{2} + \frac{2}{3} = \underline{\hspace{2cm}}$

B)  $-\frac{3}{5} - \frac{3}{10} = \underline{\hspace{2cm}}$

C)  $\frac{7}{10} - \frac{1}{4} = \underline{\hspace{2cm}}$

D)  $-\frac{3}{4} + \frac{5}{6} = \underline{\hspace{2cm}}$

E)  $7\frac{5}{7} + 2\frac{4}{7} = \underline{\underline{10\frac{2}{7}}}$

F)  $10\frac{5}{6} - 6\frac{1}{2} = \underline{\underline{\quad}}$

$$9\frac{9}{7} = 10\frac{2}{7}$$

F)  $8\frac{1}{4} - 3\frac{5}{8} = \underline{\underline{4\frac{5}{8}}}$

I:  $8\frac{1}{4} - 3\frac{5}{8}$

~~$8\frac{1}{4}$~~   $\underline{\underline{8\frac{1}{8}}} - 3\frac{5}{8}$

$7\frac{10}{8} - 3\frac{5}{8} = \underline{\underline{4\frac{5}{8}}}$

G)  $6 - 1\frac{2}{5} = \underline{\underline{4\frac{3}{5}}}$

I:  $6 - 1\frac{2}{5}$

~~$6$~~   $\underline{\underline{5\frac{5}{5}}} - 1\frac{2}{5} = \underline{\underline{4\frac{3}{5}}}$

7) Solve the following addition and subtraction word problems. Circle the keywords that help you decide whether it is addition or subtraction.

A) Karan covers  $2\frac{3}{8}$  miles by walking and  $5\frac{3}{4}$  miles by bike. Find the total distance covered by Karan.

B) Rachel cut length of rope that was  $4\frac{2}{3}$  meters into two pieces. After cutting the rope, the length of the first piece of rope is  $2\frac{1}{2}$  meters. What is the length of the second piece of rope?

C) Mr. and Mrs. Simpson went to two movies. The first movie lasted  $2\frac{1}{3}$  hours and the second one lasted  $1\frac{4}{5}$  hours. How much longer was the first than the second movie?

D) Rodrick and Valentina drove to the coast. Rodrick drove  $38\frac{9}{10}$  miles. Then Valentina drove the last  $51\frac{3}{5}$  miles. How far did they drive to the coast?