

Name _____

THIS ASSIGNMENT IS DUE WEDNESDAY, SEPTEMBER 3rd – THE FIRST FULL DAY OF THE NEW SCHOOL YEAR.

Table of Contents

Page	Objective	Suggested Completion Date
2	Place value & rounding	June 16-20
3-4	Fractions	June 23-27
5-8	Operating with fractions (+, -, •, ÷)	July 30-July 4
9-12	Operating with decimals (+, -, •, ÷)	July 7-11
13-14	Integers	July 14-18
15	Coordinate Plane & Plotting Points	July 21-25
16	Order of operations	July 28-Aug 1
17-18	Algebraic expressions	August 4-8
19	Solving one-step equations	August 11-15
20	Solving two-step equations	August 18-22
21-23	Solving multistep equations with and without rational numbers	August 25-29

Review: Sept. 1-5

Place Value & Rounding

Write each number in standard or word form.

1. 450,870,235

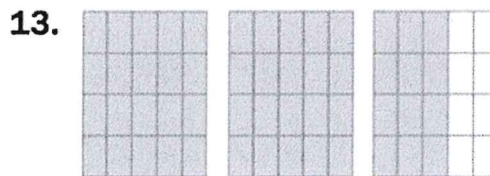
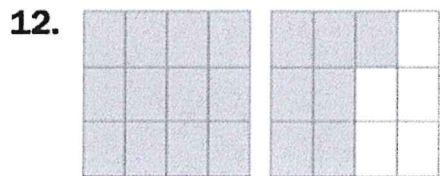
2. 35,143,650

3. six hundred fifteen million, four hundred seventy-five thousand

- | | | |
|--|---------|-------|
| 1) Round to the nearest tenth. | 8.54 | <hr/> |
| 2) Round to the nearest whole number. | 99.59 | <hr/> |
| 3) Round to the nearest tenth. | 310.286 | <hr/> |
| 4) Round to the nearest whole number. | 6.4 | <hr/> |
| 5) Round to the nearest whole number. | 6.805 | <hr/> |
| 6) Round to the nearest tenth. | 9.725 | <hr/> |
| 7) Round to the nearest hundredth. | 118.380 | <hr/> |
| 8) Round to the nearest tenth. | 90.69 | <hr/> |
| 9) Round to the nearest tenth. | 65.85 | <hr/> |
| 10) Round to the nearest whole number. | 70.59 | <hr/> |

Fractions (BASICS)

Write an improper fraction and a mixed number to describe the model.



Write the mixed number as an improper fraction.

14. $5\frac{1}{3}$

15. $4\frac{2}{7}$

16. $2\frac{4}{9}$

17. $3\frac{3}{11}$

18. $4\frac{1}{8}$

Write the improper fraction as a mixed number.

24. $\frac{27}{5}$

25. $\frac{45}{8}$

26. $\frac{67}{8}$

27. $\frac{24}{11}$

28. $\frac{95}{6}$

A) Write each set of unlike fractions in the order, starting with the smallest.

1) $\frac{5}{6}, \frac{11}{12}, \frac{2}{9}, \frac{8}{10}$

2) $\frac{7}{4}, \frac{15}{6}, \frac{9}{5}, \frac{13}{3}$

B) Write each set of unlike fractions in the order, starting with the largest.

1) $\frac{9}{6}, \frac{13}{5}, \frac{7}{9}, \frac{15}{8}$

2) $\frac{1}{2}, \frac{14}{15}, \frac{2}{3}, \frac{9}{12}$

Reduce. No Calculators!

Instructions: Reduce each fraction to its lowest terms.

$$\frac{20}{25} =$$

$$\frac{30}{35} =$$

$$\frac{9}{12} =$$

$$\frac{8}{20} =$$

$$\frac{15}{40} =$$

$$\frac{12}{14} =$$

$$\frac{12}{20} =$$

$$\frac{12}{28} =$$

$$\frac{21}{27} =$$

$$\frac{12}{16} =$$

$$\frac{10}{24} =$$

$$\frac{21}{24} =$$

$$\frac{24}{27} =$$

$$\frac{20}{24} =$$

$$\frac{5}{50} =$$

$$\frac{10}{35} =$$

$$\frac{2}{24} =$$

$$\frac{6}{16} =$$

$$\frac{25}{35} =$$

$$\frac{24}{28} =$$

$$\frac{20}{32} =$$

$$\frac{4}{24} =$$

$$\frac{10}{25} =$$

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

$$\frac{15}{21} =$$

$$\frac{6}{14} =$$

$$\frac{28}{40} =$$

$$\frac{14}{24} =$$

$$\frac{16}{20} =$$

$$\frac{8}{36} =$$

$$\frac{35}{45} =$$

$$\frac{21}{36} =$$

Adding and Subtracting Fractions

Solve. No Calculators! If needed, use the backside of this paper for additional workspace. **No work = No credit**

Use the backside or a separate piece of paper to solve problems a-g. Write your answers below.

$$(a) \quad \frac{1}{2} + \frac{1}{5} \quad (b) \quad \frac{2}{3} + \frac{5}{9} \quad (c) \quad \frac{2}{7} + \frac{3}{4}$$

$$(e) \quad 2\frac{3}{5} - \frac{4}{3} \quad (f) \quad 3\frac{2}{3} - 1\frac{1}{4} \quad (g) \quad 1\frac{1}{2} - \frac{7}{10}$$

(a) _____

(e) _____

(b) _____

(f) _____

(c) _____

(g) _____

$$2\frac{1}{5} + 1\frac{3}{4}$$

$$1\frac{1}{2} + 2\frac{3}{5}$$

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

Adding and Subtracting SIGNED (+/-) Fractions

$$-\frac{2}{3} + \left(-\frac{4}{5}\right)$$

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

$$\frac{2}{3} - \left(-\frac{1}{4}\right)$$

$$\frac{4}{9} - \frac{2}{3}$$

$$\frac{2}{7} - \frac{1}{3}$$

$$\frac{1}{6} + \left(-\frac{1}{2}\right)$$

Multiply and Divide Fractions

Solve. No Calculators! If needed, use the backside of this paper for additional workspace. **No work = No credit**

Find the value of each expression in lowest terms.

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

$$\frac{1}{4} \times \frac{5}{3}$$

$$\frac{10}{3} \times \frac{11}{6}$$

$$\frac{1}{6} \div \frac{8}{11}$$

$$\frac{11}{2} \div \frac{1}{2}$$

$$\frac{1}{2} \div \frac{1}{2}$$

$$\frac{17}{6} \div \frac{3}{5}$$

$$\frac{13}{7} \times \frac{14}{11}$$

$$\frac{3}{2} \div \frac{4}{9}$$

Simplifying Complex Fractions

Solve. No Calculators! If needed, use the backside of this paper for additional workspace. **No work = No credit**

$$\frac{\frac{3}{9}}{\frac{5}{6}}$$

$$\frac{\frac{6}{12}}{\frac{7}{8}}$$

$$\frac{\frac{5}{7}}{\frac{7}{9}}$$

$$\frac{\frac{5}{8}}{\frac{1}{1}}$$

Add and Subtract Signed (+/-) Decimals

Solve. No Calculators! If needed, use the backside of this paper for additional workspace. **No work = No credit**

Find each sum.

$$5.4 + (-9.7)$$

$$10.8 + (-4.73)$$

$$(-0.5) + 0.3$$

$$(-4.79) + (-0.4)$$

Find each difference.

$$2.2 - 7.3$$

$$(-8.1) - (-8.9)$$

$$2.9 - 9.4$$

$$(-3.9) - 8.9$$

Multiply and Divide Decimals

Solve. No Calculators! If needed, use the backside of this paper for additional workspace. **No work = No credit**

Solve each problem.

$$\begin{array}{r} 1) \quad 63.9 \\ \times \quad 7.0 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 44.84 \\ \times \quad 9.84 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 88.6 \\ \times \quad 5.01 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 39.6 \\ \times \quad 5.20 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 28.15 \\ \times \quad 5.5 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 14.36 \\ \times \quad 4.9 \\ \hline \end{array}$$

Divide. Check your answer.

$$2.1 \overline{)25.2}$$

$$3.8 \overline{)34.2}$$

$$0.4 \overline{)14.6}$$

$$8.75 \overline{)35.35}$$

$$78.54 \div 4.2$$

$$9.52 \div 1.19$$

$$36.47 \div 0.7$$

$$0.984 \div 12.3$$

Rational Decimals- Terminating and Repeating

Solve. No Calculators! Write each rational number as a decimal. Identify each decimal as: Repeating or terminating. Use bar notation in your final answers for all repeating decimals. You must show your long division work. **No work = no credit.**

1) $\frac{8}{11} =$ _____

Circle: Repeating or Terminating

2) $\frac{9}{16} =$ _____

Circle: Repeating or Terminating

3) $\frac{4}{72} =$ _____

Circle: Repeating or Terminating

4) $\frac{8}{6} =$ _____

Circle: Repeating or Terminating

Integer Operations

You must practice your integer operations (addition, subtraction, multiplication, division). Memorize the rules! **No Calculator!**

Find each sum.

1) $(-3) + (-5)$

2) $(-6) + (-1)$

3) $1 + (-1)$

4) $(-5) + (-3)$

Find each difference.

5) $(-6) - 3$

6) $7 - (-1)$

7) $(-3) - 8$

8) $3 - 8$

Find each product.

19) $(-5)(10)$

20) $(-3)(7)$

21) $(7)(-7)$

22) $(5)(-9)$

23) $(7)(-1)$

24) $(-9)(5)$

25) $(-6)(-6)$

26) $(-3)(-10)$

Find each quotient.

43) $\frac{-70}{-10}$

44) $\frac{-21}{-7}$

45) $\frac{36}{-4}$

46) $\frac{4}{-1}$

49) $-72 \div -9$

50) $-18 \div 9$

51) $8 \div -2$

52) $-20 \div -5$

Evaluate each expression.

9) $7 - (-5)$

10) $(-2) - (-2)$

11) $(-4) - (-5)$

12) $(-7) - 7$

13) $(-1) - (-1)$

14) $3 - (-5)$

15) $6 + (-1)$

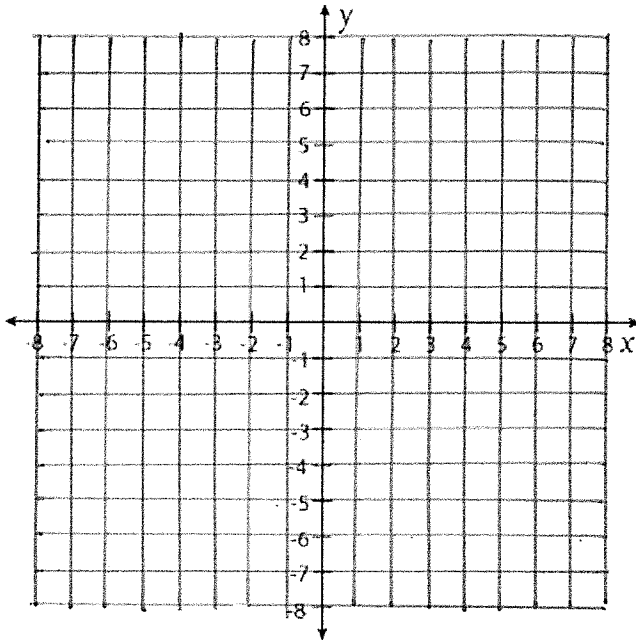
16) $(-8) + 4$

17) $(-5) - (-1)$

18) $(-8) - (-6)$

Coordinate Plane & Plotting Points

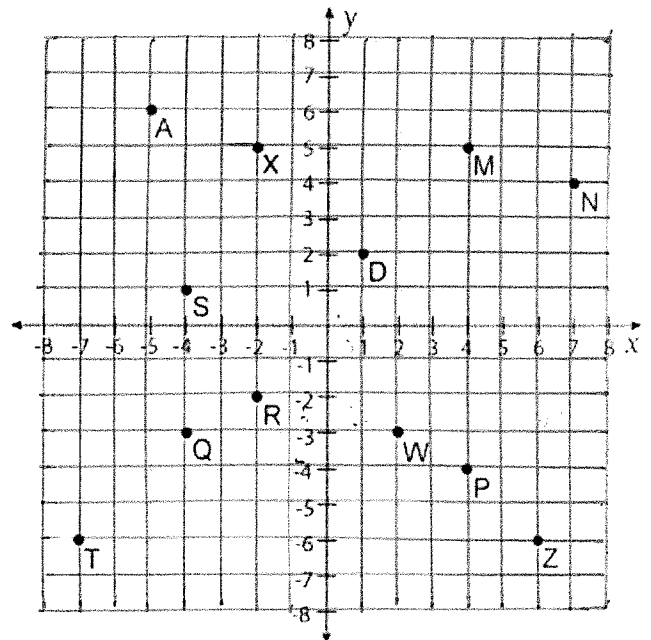
A) Graph the given points on the coordinate plane.



- | | |
|----------------|---------------|
| a) $B(-4, 2)$ | b) $E(8, 5)$ |
| c) $G(-5, 5)$ | d) $L(8, -4)$ |
| e) $Q(3, -1)$ | f) $X(-2, 5)$ |
| g) $S(4, -6)$ | h) $D(2, -2)$ |
| i) $A(-7, -5)$ | j) $M(6, 0)$ |

B) Determine the coordinate of each letter in the grid.

M = _____	D = _____
Q = _____	A = _____
W = _____	N = _____
S = _____	P = _____
T = _____	R = _____
Z = _____	X = _____



Order of Operations

Simplify each expression using the Order of Operations (PEMDAS). No Calculators! If needed, use the backside of this paper for additional workspace. **No work = No credit**

$$42 \div -6 + 5$$

$$6^2 + -14 \div 2 - (-8)$$

$$-64 \div 4(2 - 6)$$

$$9 \div 3 + 7 \times 4 \div 2$$

$$4(-12 + 6) \div 3$$

$$12 \div 6 + 5^2 \times 3$$

$$-12^2 \div 4 - 3 \times 2^4$$

$$-4(1 + 5)^2 \div 6 - (42 + 5)$$

$$-6 \times 8 - (4^2 + 2) + 72 \div -8$$

$$7(5 + 3) \div 4(9 - 2)$$

Algebraic Expressions

Evaluate each using the values given.

$$y + z + 2; \text{ use } y = -6, \text{ and } z = 5$$

$$p(q \div 3 - p); \text{ use } p = -6, \text{ and } q = -3$$

$$z \div 6 + x + x - 5; \text{ use } x = 1, \text{ and } z = 6$$

Simplify each expression by (1) applying the distributive property and/or (2) combining like terms.

Simplify each expression.

$$2x + 8x$$

$$-n + 4 + n - 7$$

$$-7m - 5m$$

$$8 + 9r + 2r$$

Simplify each expression.

$$9x + 9 - 1$$

$$10n - 4n$$

$$-9 - 6(-v + 5)$$

$$-10(-8x + 9) - 8x$$

Solving One-Step Equations

Solve each equation.

$$26 = 8 + v$$

$$3 + p = 8$$

$$m + 4 = -12$$

$$x - 7 = 13$$

$$m - 9 = -13$$

$$p - 6 = -5$$

$$\frac{v}{8} = 2$$

$$16 = \frac{k}{11}$$

$$-15x = 0$$

$$-17x = -204$$

$$21 = -7n$$

$$\frac{m}{4} = -13$$

Solving Two-Step Equations**Solve each equation.**

$$6 = \frac{a}{4} + 2$$

$$-6 + \frac{x}{4} = -5$$

$$9x - 7 = -7$$

$$0 = 4 + \frac{n}{5}$$

$$-9x + 1 = -80$$

$$-6 = \frac{n}{2} - 10$$

$$-15 = -4m + 5$$

$$10 - 6v = -104$$

$$8n + 7 = 31$$

$$-9x - 13 = -103$$

Solving Multistep Equations

- 1) apply the distributive property
- 2) combine like terms on the left side of the equal sign
- 3) combine like terms on the right side of the equal sign
- 4) collect the variable on the same side of the equal sign
- 5) eliminate the constant
- 6) eliminate the coefficient

$$6a + 5a = -11$$

$$-6n - 2n = 16$$

$$4x + 6 + 3 = 17$$

$$0 = -5n - 2n$$

$$18 = 3(3x - 6)$$

$$30 = -5(6n + 6)$$

$$8(4k - 4) = -5k - 32$$

$$-8(-8x - 6) = -6x - 22$$

$$8(1 + 5x) + 5 = 13 + 5x$$

$$-11 - 5a = 6(5a + 4)$$

Solving Equations w/ Rational Numbers

$$w + \frac{1}{2} = \frac{7}{8}$$

$$9z = \frac{3}{4}$$

$$-\frac{5}{6}a = 20$$