Name _____

THIS ASSIGNMENT IS DUE WEDNESDAY, SEPTEMBER 9th – THE FIRST FULL DAY OF THE NEW SCHOOL YEAR.

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Review: Sept. 7-8

Place Value & Rounding

Write each number in standard or word form.

1. 450,870,235

_____

_____

2. 35,143,650

_____

_____

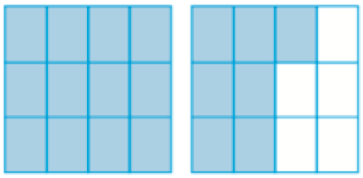
3. six hundred fifteen million, four hundred seventy-five thousand

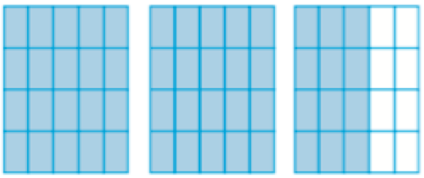
_____

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

Fractions (BASICS)

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

12. 

13. 

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

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

(a) _____ (e) _____

(b) _____ (f) _____

(c) _____ (g) _____

1. $2\frac{1}{5}+1\frac{3}{4}$ 5. $1\frac{1}{2}+2\frac{3}{5}$ 9. $3\frac{1}{2}-1\frac{1}{2}$

Adding and Subtracting <u>SIGNED (+/-)</u> 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.

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

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

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

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

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

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

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

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

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

Simplifying Complex Fractions

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

1 a.

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

1 b.

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

2 a.

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

2 b.

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

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.

1) $5.4 + (-9.7)$

2) $10.8 + (-4.73)$

3) $(-0.5) + 0.3$

4) $(-4.79) + (-0.4)$

Find each difference.

11) $2.2 - 7.3$

12) $(-8.1) - (-8.9)$

13) $2.9 - 9.4$

14) $(-3.9) - 8.9$

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.

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

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

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

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

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

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

Divide. Check your answer.

13. $2.1\overline{)25.2}$

14. $3.8\overline{)34.2}$

15. $0.4\overline{)14.6}$

16. $8.75\overline{)35.35}$

17. $78.54 \div 4.2$

18. $9.52 \div 1.19$

19. $36.47 \div 0.7$

20. $0.984 \div 12.3$

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) $6 + (-1)$

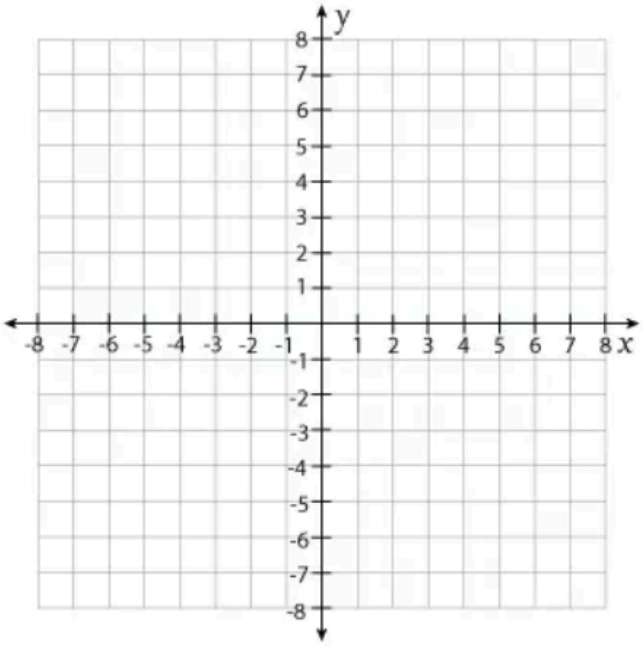
16) $(-8) + 4$

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 = _____

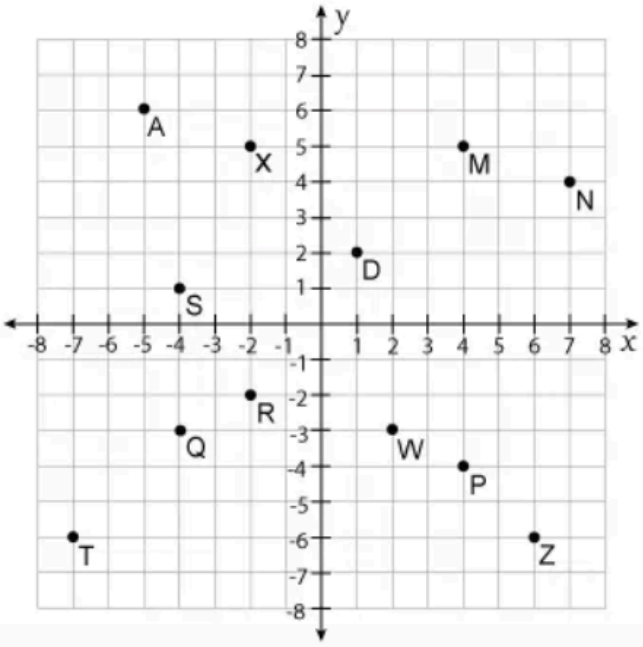
Q = _____ A = _____

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.

13) $y + z + 2$; use $y = -6$, and $z = 5$

14) $p(q \div 3 - p)$; use $p = -6$, and $q = -3$

15) $z \div 6 + x + x - 5$; use $x = 1$, and $z = 6$

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

Simplify each expression.

1) $2x + 8x$

2) $-n + 4 + n - 7$

3) $-7m - 5m$

4) $8 + 9r + 2r$

Simplify each expression.

19) $9x + 9 - 1$

20) $10n - 4n$

21) $-9 - 6(-v + 5)$

22) $-10(-8x + 9) - 8x$

Solving One-Step Equations

Solve each equation.

1) $26 = 8 + v$

2) $3 + p = 8$

5) $m + 4 = -12$

6) $x - 7 = 13$

7) $m - 9 = -13$

8) $p - 6 = -5$

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

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

17) $-15x = 0$

18) $-17x = -204$

19) $21 = -7n$

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

Solving Two-Step Equations

Solve each equation.

1) $6 = \frac{a}{4} + 2$

2) $-6 + \frac{x}{4} = -5$

3) $9x - 7 = -7$

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

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

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

13) $-15 = -4m + 5$

14) $10 - 6v = -104$

15) $8n + 7 = 31$

16) $-9x - 13 = -103$

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

1) $6a + 5a = -11$

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

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

4) $0 = -5n - 2n$

11) $18 = 3(3x - 6)$

12) $30 = -5(6n + 6)$

21) $8(4k - 4) = -5k - 32$

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

23) $8(1 + 5x) + 5 = 13 + 5x$

24) $-11 - 5a = 6(5a + 4)$

Solving Equations w/ Rational Numbers

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

12. $9z = \frac{3}{4}$

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