Name ____

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

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****Reminder**: 5 Khan Academy activities assigned to your school account.
Due September 9th (required minimum score of 70% for credit)

Write Numbers in Word and Standard Form

Write the number name (word form). Pay attention to spelling and hyphens.

1) 560.08

____

2) 7.016

____

3) 24.47

____

4) 6,003

____

5) 3,005,600.07

____

Write the number the name represents (standard form). Don't forget commas & decimals.

6) Forty-five thousandths

7) Seventeen and seven hundredths

8) Five million, three hundred thousand, twenty-nine and six tenths

9) Six million and five thousandths

10) Two hundred eight thousand, four

Rounding Whole Numbers and Decimals

Round each number to the nearest thousand.

1.) 7,392 ____________________ 2.) 62,831 ______________________

Round each number to the nearest hundred.

3.) 5,969 ____________________ 4.) 521,059 _____________________

Round each number to the nearest ten.

5.) 685 ______________________ 6.) 94,008 _______________________

Round each number to the nearest whole.

7.) 517.346 ___________________ 8.) 0.82 __________________________

Round each number to the nearest tenth.

9.) 62.451 ____________________ 10.) 9.07 ________________________

Round each number to the nearest hundredth.

11.) 0.423 ____________________ 12.) 7.396 ______________________

Round each number to the nearest thousandth.

13.) 51.0483 __________________ 14.) 0.8734 _____________________

Add and Subtract Whole Numbers

Solve: No Calculators! If needed, use the backside of this paper for additional workspace. You can line up the digits in the graphing boxes to keep your work organized. **No work = no credit.**

1.) 6,496 + 3,288 =

2.) 54,398 + 64,508 =

3.) 3,254 + 8,913 =

4.) 754 – 549 =

5.) 54,678 + 74, 357 =

6.) 98,455 – 14,789 =

7.) 30,904 + 32,899 =

8.) 908 – 774 =

Multiply and Divide Whole Numbers

Solve: No Calculators! If needed, use the backside of this paper for additional workspace. You can line up the digits in the graphing boxes to keep your work organized. **No work = no credit.**

*For answers with remainders show 2 ways (use R notation **AND** use fraction).

$24 \div 5 =$	$108 \div 6 =$	$116 \times 15 =$	$153 \div 11=$
$74 \times 11 =$	$190 \div 19 =$	$963 \div 27 =$	$79 \times 9 =$
$837 \div 67 =$	$444 \times 77 =$	$114 \div 4 =$	$42 \times 58 =$

Factors and Multiples

Exercises: List all the factors for each number. Circle the <u>Greatest Common Factor</u>.

1) 18 and 24

2) 12 and 15

3) 17 and 20

4) 21 and 40

Exercises: Find the first 10 multiples of the following. Circle the <u>Least Common Multiple.</u>

5) 12 and 4

6) 9 and 8

Simplifying Fractions and Equivalent Fractions

Exercises: Reduce each fraction to simplest form.

$\frac{3}{30} =$ $\frac{44}{48} =$ $\frac{5}{15} =$ $\frac{10}{35} =$

$\frac{10}{45} =$ $\frac{6}{14} =$ $\frac{28}{32} =$ $\frac{20}{24} =$

$\frac{5}{15} =$ $\frac{4}{32} =$ $\frac{30}{35} =$ $\frac{3}{6} =$

Exercises: Are these fractions equivalent? Write yes or no. Equivalent means equal!

$\frac{5}{10} = \frac{15}{30}$ $\frac{10}{10} = \frac{30}{30}$ $\frac{4}{6} = \frac{20}{18}$ $\frac{1}{3} = \frac{2}{6}$

$\frac{7}{8} = \frac{35}{40}$ $\frac{3}{9} = \frac{9}{36}$ $\frac{2}{8} = \frac{10}{40}$ $\frac{4}{5} = \frac{12}{15}$

Exercises: Find the missing numbers in the <u>equivalent</u> fractions below.

$\frac{4}{\boxed{}} = \frac{20}{45}$ $\frac{3}{7} = \frac{\boxed{}}{28}$ $\frac{\boxed{}}{6} = \frac{4}{12}$ $\frac{5}{9} = \frac{\boxed{}}{36}$

$\frac{10}{12} = \frac{\boxed{}}{36}$ $\frac{4}{7} = \frac{12}{\boxed{}}$ $\frac{1}{2} = \frac{\boxed{}}{8}$ $\frac{7}{\boxed{}} = \frac{28}{32}$

Mixed Numbers, Improper Fractions, Decimals

Exercises: Convert the mixed number into an improper fraction.

Ex) $6\frac{1}{5} = \frac{31}{5}$

1) $10\frac{1}{4} =$

2) $10\frac{1}{6} =$

3) $6\frac{2}{6} =$

4) $3\frac{1}{7} =$

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

Exercises: Convert the improper fraction into a mixed number.

m. $\frac{7}{5} =$

n. $\frac{9}{4} =$

o. $\frac{5}{3} =$

q. $\frac{13}{7} =$

r. $\frac{9}{2} =$

s. $\frac{17}{9} =$

Exercises: Convert the fraction into a decimal. Tip: Write an equivalent fraction that has a 10, 100, or 1,000 in the denominator. Then, say the fraction out loud. Write the decimal that matches the sound. (Example: $\frac{3}{25} = \frac{12}{100} = 0.12$)

1. $\frac{4}{20} =$ ______________
2. $\frac{3}{5} =$ ______________
3. $\frac{9}{10} =$ ______________
4. $\frac{1}{4} =$ ______________
5. $\frac{4}{5} =$ ______________
6. $\frac{1}{2} =$ ______________

Exercises: Convert the decimal into a fraction and simplify if needed. Tip: Say each decimal out loud. Write the fraction that matches the sound. (Example: 4.7 = four and seven tenths = $4\frac{7}{10}$)

1.) 0.9

2.) 1.3

3.) 2.8

4.) 0.6

5.) 0.36

6.) 3.95

7.) 0.582

8.) 2.375

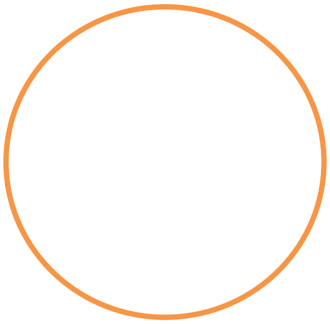
9.) 1.450

10.) 0.6222

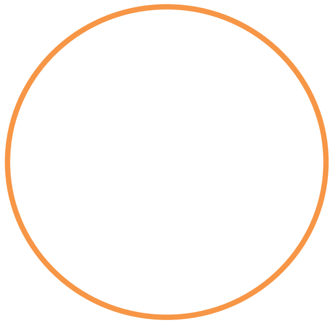
Background of Fractions

Divide the circles and shade the following fractional parts with the given fractions.

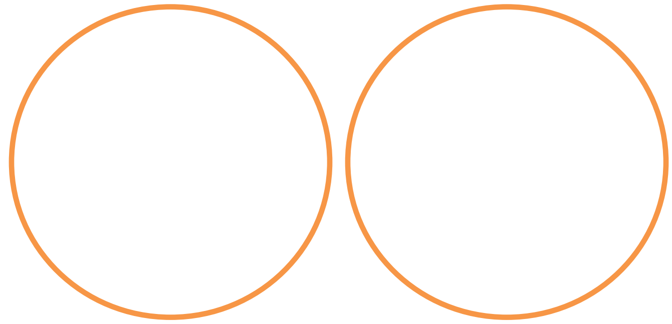
1.) $\frac{1}{3}$



2.) $\frac{7}{8}$



3.) $\frac{3}{2}$ *Use both circles below.



Adding and Subtracting Fractions

Hints/Guide: When adding and subtracting fractions, you need to be sure that each fraction has the same denominator, then add or subtract the numerators. **Final answers should be simplified and in mixed form if applicable.**

Solve: No Calculators! Use the backside of this paper for additional workspace. **No work = no credit.**

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

(e) $2\frac{3}{5}-\frac{4}{3}$ (f) $3\frac{2}{3}-1\frac{1}{4}$ (g) $1\frac{1}{2}-\frac{7}{10}$ (h) $4\frac{1}{4}-\frac{2}{5}-\frac{1}{8}$

answers shown below on lines:

(a) ______________________________ (b) ______________________________

(c) ______________________________ (d) ______________________________

(e) ______________________________ (f) ______________________________

(g) ______________________________ (h) ______________________________

Multiply and Divide Fractions

Hints/Guide: To multiply fractions, multiply the numerators and the denominators. To divide fractions, Keep-Change-Flip!

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

3. $\frac{1}{3} \div \frac{13}{9}$

4. $\frac{13}{4} \div \frac{1}{2}$

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

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

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

8. $\frac{4}{3} \div \frac{11}{12}$

9. $\frac{1}{3} \times \frac{20}{9}$

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

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

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

13. $\frac{14}{9} \times \frac{7}{10}$

14. $\frac{15}{8} \times \frac{7}{6}$

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

Add and Subtract Decimals

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

Hints/Guide: When adding and subtracting decimals, the key is to line up the decimals above each other, insert zeros so all numbers have the same place value length, then use the same rules as adding and subtracting whole numbers, with the answer having a decimal point in line with the problem.

1) 15.7 + 2.34 + 5.06 =

2) 64.038 + 164.8 + 15.7 =

3) 2.6 + 64.89 + 4.007 =

4) 12.9 + 2.008 + 75.9 =

5) 87.4 - 56.09 =

6) 5.908 - 4.72 =

7) 68.9 - 24.74 =

8) 955.3 - 242.7 =

Multiply Decimals

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

Hints/Guide: Multiply like normal without paying attention to the decimal. Then, place your decimal in the final answer. Your final answer should have the same number of decimal digits as the <u>total</u> decimal digits <u>in the problem.</u>

1. $\begin{array}{r} 2.3 \\ \times\ 3.4 \\ \hline \end{array}$

2. $\begin{array}{r} 6.5 \\ \times\ 4.3 \\ \hline \end{array}$

3. $\begin{array}{r} 8.4 \\ \times\ 5.2 \\ \hline \end{array}$

4. $\begin{array}{r} 9.2 \\ \times\ 4.6 \\ \hline \end{array}$

5. $\begin{array}{r} 2.56 \\ \times\ \ 72 \\ \hline \end{array}$

6. $\begin{array}{r} 56.7 \\ \times\ \ 35 \\ \hline \end{array}$

7. $\begin{array}{r} 0.78 \\ \times\ \ 2.3 \\ \hline \end{array}$

8. $\begin{array}{r} 9.5 \\ \times\ 0.45 \\ \hline \end{array}$

9. $\begin{array}{r} 15.7 \\ \times\ 2.35 \\ \hline \end{array}$

10. $\begin{array}{r} 28.3 \\ \times\ 0.59 \\ \hline \end{array}$

11. $\begin{array}{r} 0.354 \\ \times\ \ 0.8 \\ \hline \end{array}$

12. $\begin{array}{r} 0.624 \\ \times\ \ 0.85 \\ \hline \end{array}$

work shown below and on back.

Order of Operations

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

Hints/Guide: Sometimes parentheses mean multiplication. For example, 2(3) is the same as 2×3.

1. $5 \cdot 2 + 3$

2. $8 \div 2 - 3$

3. $3^2 + 4$

4. $3(8-6) - 1^2$

5. $16 - (10 + 5) \div 3$

6. $2^3 + 8 - 6$

7. $5 \cdot 2^2 + 3^2$

8. $5 - (3 - 1) + 1$

9. $18 - 4^2 \div 8$

10. $2^3 + 3(5-2)^2$

11. $3^3 - 2(3)$

12. $24 - 2(1+2)^2$

work shown below.