WEEK 1

Complete each of the problems below. SHOW YOUR WORK.

Basic Operations:

$64 \cdot 97 =$ $8652 \div 12 =$

$38 \cdot 56 =$ $4716 \div 9 =$

Multiply the following decimals.

$8.03 \cdot 3 =$ $5.01 \cdot 11.6 =$ $2.64 \cdot 1.4 =$

Basic operations with fractions.

$\frac{4}{5} + \frac{7}{12} =$ $1\frac{2}{3} + \frac{9}{12} =$ $\frac{11}{15} - \frac{1}{4} =$

$\frac{5}{6} \cdot 12 =$ $\frac{1}{8} \bullet \frac{5}{9} =$ $3 \div \frac{5}{8} =$

$\frac{3}{8} \div \frac{3}{4} =$ $1\frac{2}{3} \div 1\frac{1}{4} =$ $5\frac{1}{6} - \frac{8}{15} =$

Simplify using order of operations.

$6^2 \div (15 - 6) \cdot 7 + 5$ $40 - 8 \div 2 + 3 \cdot 2^4$

WEEK 2

Complete each of the problems below. SHOW YOUR WORK.

Basic Operations:

$382 \cdot 78 =$ $1463 \div 7 =$

$95 \cdot 23 =$ $1936 \div 8 =$

Write each decimal as a fraction or mixed number in simplest form.

0.9 = 0.34 = 1.4 =

12.05 = 0.08 = 4.004 =

Use factor trees to find the prime factorization of the following numbers. Use exponents when writing your prime factorization.

72 88 200

Use prime factorization to find the GCF for the following pairs of numbers.

54 and 88 120 and 75

Find the percent of each number by using a proportion and cross products.

48% of 50

40% of 95

75% of 116

8% of 85

98% of 30

125% of 60

Simplify using order of operations.

$25 \div 5 + 6(12 - 4)$

$80 - 8 \cdot 3^2$

WEEK 3

Complete each of the problems below. SHOW YOUR WORK.

Basic Operations:

$586 \cdot 47 =$ $7130 \div 5 =$

$304 \cdot 16 =$ $4761 \div 3 =$

Basic operations with integers.

$(-6) + 15 =$ $7 - 19 =$ $(-18) - 14 =$ $23 + (-45) =$

$(-13) \cdot 18 =$ $(-436) \div (-8) =$ $(-78) \div 6 =$

Use prime factorization to find the LCM for the following pairs of numbers.

30 and 42

64 and 80

Multiply and divide mixed numbers.

$\frac{2}{3} \cdot 1\frac{3}{5} =$

$3\frac{1}{2} \bullet \frac{2}{3} =$

$2\frac{4}{9} \bullet \frac{4}{11} =$

$4\frac{2}{3} \cdot 1\frac{1}{8} =$

$9 \div 1\frac{1}{9} =$

$5 \div 1\frac{3}{7} =$

Dividing decimals by whole numbers.

19.254 ÷ 4 =

54.65 ÷ 5 =

18.06 ÷ 2 =

3.45 ÷ 15

8.724 ÷ 4 =

5.418 ÷ 3 =

WEEK 4

Complete each of the problems below. SHOW YOUR WORK.

Basic Operations:

$123 \cdot 456 =$

$7380 \div 15 =$

$625 \cdot 373 =$

$5356 \div 13 =$

Addition and subtraction with integers.

$-16 + (-54) =$

$39 - (-12) =$

$88 - 110 =$

$73 + (-92) =$

$40 - 89 =$

$(-67) - 76 =$

Basic Operations with decimals.

5.091 + 13.68 =

0.062 + 3.08 =

17.12 – 4.096 =

14.213 – 12.431 =

3.65 · 0.43 =

2.5 · 13.58 =

Use prime factorization to find the GCF and LCM for the following pairs of numbers.

18 and 32

39 and 60

Order of operations.

$(10 - 2 \cdot 2) \div (6 - 3) + 1^6$

$9 - (42 - 6) \div 3^2$

Solve the following variable equations.

$5x + 10 = 100$

$v + 9 = 14$

WEEK 5

Complete each of the problems below. SHOW YOUR WORK.

Basic Operations:

$873 \cdot 106 =$

$5467 \div 11 =$

$556 \cdot 289 =$

$5663 \div 7 =$

GCF and LCM word problems.

The Spanish teachers are going to throw a fiesta and they are buying treats to put in some piñatas. They want each piñata to have the same amount of each item, without anything leftover. If they bought 45 pencils, 150 stickers, and 90 pieces of candy, what is the largest number of piñatas they can buy? How many pencils, stickers, and pieces of candy will go in each piñata?

Ralph and Susan are hosting a barbecue and need to buy hotdogs and hamburgers. They want to buy the same number of hotdogs and hamburgers, but hotdogs are sold in packages of 8 and hamburgers are sold in packages of 12. What is the least number of hotdogs and hamburgers they can buy so that they have the same amount of each? How many packages of hotdogs will they need to buy and how many packages of hamburgers?

WEEK 6

Complete each of the problems below. SHOW YOUR WORK.

Basic Operations:

$3617 \cdot 27 =$

$59208 \div 8 =$

$9041 \cdot 476 =$

$55,044 \div 11 =$

Simplify each fraction to lowest terms.

$\frac{18}{30} =$

$\frac{40}{54} =$

$\frac{19}{38} =$

$\frac{25}{150} =$

Use factor trees to find the prime factorization of the following numbers. Use exponents when writing your prime factorization.

75 216 180

Find the missing value in the following sets of data using the given information.

Data set: 45, 49, 23, 53, 60, ?

Mean = 44

Data set: 9, 3, 5, 9, 11, 4, 7, ?

Mean = 7

WEEK 7

Complete each of the problems below. SHOW YOUR WORK.

Basic Operations:

$8215 \cdot 306 =$

$85,059 \div 13 =$

$9876 \cdot 123 =$

$6045 \div 15 =$

Find the percent of each number.

15% of 342

350% of 60

18% of 94

4% of 28

27% of 200

150% of 48

Find the mean, median, mode, and range for the following data sets.

Data set 1: 31, 54, 44, 38, 58

Mean:

Median:

Mode:

Range:

Data set 2: 25, 33, 25, 49, 50, 25

Mean:

Median:

Mode:

Range:

Simplify the expressions.

$5(n + 3)$ $7(2y - 8)$ $-3(2x + 1)$

$-4(4r - 5)$ $6m - 7(6 - 7m)$ $-9(2r - 3m)$

$4z - 2z + 3(z - 2)$ $2(3x - 4) - 5(x - 3)$

Order of operations with integers.

$(-5) \cdot 3 \div (2^2 - 1)$ $(-4 \bullet 3^3 - (-4)) - 3 \cdot 6$

WEEK 8

Complete each of the problems below. SHOW YOUR WORK.

Basic Operations:

$3892 \cdot 256 =$

$34,146 \div 8 =$

$1548 \cdot 3372 =$

$12,549 \div 6 =$

Evaluate the following expressions if $m = 3$ and $k = -9$

$6k + m$

$m^3 + 2k^2$

$5mk$

$3k - 4m$

Use order of operations to simplify the following expressions.

$(-\ 11\ -\ 8)(4\ +\ 3) + (-\ 9) \cdot 6\ -\ 2^3$

$(2\ +\ 39\ +\ 13) \div (-\ 6)(12\ +\ (-\ 5))$

$-\ 150 \div (6\ +\ 3 \cdot 8) - 5^2$

$5 \cdot 8\ +\ 6 \div (-\ 6)\ -\ 12(-\ 2)$

Define a variable and write an algebraic equation for each scenario, then solve.

A moving company charges a $75 flat rate plus $63/hour. The Wilson family paid the movers $390. How many hours did the moving company work?

Susan planted flowers in her garden over the weekend. She planted 12 more than 4 times the amount of tulips for her hydrangeas. If she planted 80 hydrangeas, how many tulips did she plant?