5th Grade Assignment – Week #15

<u>Group Assignment</u>:

Important! Note that the first long division problem (below) needs to be done before the group meets. (See also the first "Individual Work" problem, below.)

For Tuesday:

- **Factors**

  With each pair of numbers, write out the factors of each number, in one color circle the common factors, and in another color circle the greatest common factor.

  1) 20 and 25   2) 18 and 30   3) 16 and 21   4) *Challenge!* 84 and 280

- **Multiples**

  With each pair of numbers, write out the multiples (at least ten of them) of each number, then circle the common multiples in one color, and circle the least common multiple in another color.

  5) 6 and 8   6) 20 and 50   7) 9 and 14   8) *Challenge!* 48 and 40

- **Long Division** (using "Flexible Long Division")

  9)   Each person in the group should have done this problem on their own before the group meeting. Now everyone should share their solution and method (and points of confusion) with the others in the group. Perhaps we will see different ways to get to the same answer!
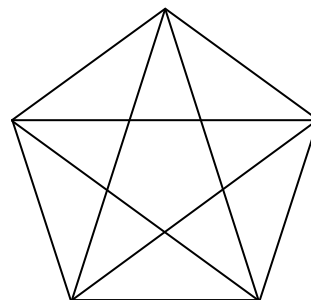 $3190 \div 5$

  10) Do this problem together: $2184 \div 8$

  11) *Challenge!* Perhaps try this one together: $11{,}085 \div 15$

For Thursday: **Puzzles!**

- Perhaps, finish any of the problems that you didn't complete from Tuesday's assignment.

- **Puzzle #1.** My favorite number is 142857. Calculate the following in order to find out why it is my favorite number. Look for patterns!

    a) Find twice my favorite number.
    b) Find three times my favorite number.
    c) Find four times my favorite number.
    d) Find five times my favorite number.
    e) Find six times my favorite number.
    f) Find seven times my favorite number.

- **Puzzle #2.** How many triangles are there in this figure?
  (Hint: There are more than 20.)

<u>Individual Work</u>

Long Division. Solve the below problem using "Flexible Long Division"
$$3190 \div 5$$
<u>Important Note</u>: This problem needs to be done before Tuesday's group meeting, and then during the group meeting everyone will share how they did it.

Division with Zeroes. Do each of the following problems
1. 24,000÷6
2. 6,300,000÷7
3. 620,000÷200
4. 4,800,000÷80,000

Fact Families. With each problem, first do the calculation, and then also give the three other facts in the fact family.
5. 300,000-700
6. 74 x 23

Division Circles. For each one given below, give the other three parts of the division circle (as I did in previous lectures).
7. 37÷5
8. $5\frac{3}{7}$

Divisibility.
9. Is 57,310,392 divisible by 2, 3, 4, 5, 9, or 10?
10. Is 511 divisible by 7?

Calculation Practice.
11. 308x28
12. 738–274
13. 4076–2778
14. Look for sums of ten in each column!

$$\begin{array}{r} 7675 \\ 1847 \\ 7435 \\ 232 \\ 2603 \\ + \ 6856 \\ \hline \end{array}$$