MATH 4: ASSIGNMENT 8
NOVEMBER 10, 2019
HOMEWORK

1. Find GCF (or GCD), LCM of the following numbers by **first->** writing the number's prime factorization, **second**-> underlining the common factors, **third**-> Vienne diagram with common factors in the intersection.

    a. 2002 and 44;
    b. 36 and 42;
    c. 32 and 24;

2. Make regular fractions from irregular:

(a) $\frac{29}{13}$ (b) $\frac{17}{5}$ (c) $\frac{49}{8}$ (d) $\frac{13}{3}$

3. Make irregular fractions from regular:

(a) $1\frac{1}{13}$ (b) $3\frac{3}{5}$ (c) $11\frac{5}{8}$ (d) $4\frac{2}{3}$

4. Compare fractions, write >, <, = between fractions. Write in your home work sheet.

(a) $\frac{4}{5}\square\frac{7}{9}$; (a) $\frac{11}{16}\square\frac{7}{4}$; (a) $3\square\frac{13}{5}$; (a) $\frac{4}{22}\square\frac{2}{13}$;

5. Compute and give the answer as a regular fraction:

    a. $\frac{1}{5}+\frac{3}{4}=$ d) $\frac{1}{5}+\frac{1}{3}=$

    b. $\frac{2}{3}-\frac{1}{4}=$ e) $\frac{4}{9}+\frac{1}{6}=$

    c. $1\frac{1}{3}-\frac{1}{2}=$ f) $\frac{33}{11}+\frac{15}{7}=$

6. Open parenthesis:

    a. $3(x+11) =$
    b. $2(7-x) =$
    c. $11(11x-3) =$

Over to the next page please. $\longrightarrow$

7. Move everything to the left, so that the right side will be 0 (zerro). Simplify by collecting similar terms.

    a. $\boldsymbol{2x + a\ - 7\ = x - a + 1}$
    b. $\boldsymbol{3y - b\ + 4\ = b - y - 1}$
    c. $\boldsymbol{x + 2a\ + 11\ = 11 - x - a}$

8. The picture below shows two meshed gears, one with 24 teeth, the other with 36 teeth (thus, when you rotate the smaller gear by one tooth, i.e. by 1/24 of a rotation, the larger is also rotated by one tooth, i.e. by 1/36 of a rotation). How many times do you need to turn the smaller gear before the letters on both gears are again in upright position? What if the larger gear had 40 teeth, not 36?

[*Hint: In order for the letters to appear in upright position, the gears have to make a full rotation, or several full rotations.]*