**Summer Assignment for incoming 8th-Grade Students – Greenwood Lakes Middle School**

Name: _____

Command of the topics in this assignment are important to be successful in Pre-Algebra. These problems should all be completed correctly (not attempted), and *all work must be shown*. It is your responsibility to know and understand these topics before the start of the school year. There is **NO CALCULATOR** to be used on this assignment. This assignment will be due the week of August 10th; a specific date will be given by your teacher.

**ALL work MUST be shown.**

Simplify.

1) $4w + 5n - 8 + 2w - 4n + 9$ 2) $5(3r - 4) + 6r + 28$ 3) $3m^2 + 5m - m^2 + m + 3$

Solve the equation.

4) $14 = d - 6$ 5) $5 + c = 10$ 6) $5m = 11$ 7) $\frac{f}{6} = 2$

8) $-8 = 5z + 16$ 9) $\frac{f}{6} - 2 = -14$ 10) $-2r + 5 = 13$ 11) $-4m + 10 \leq 2$

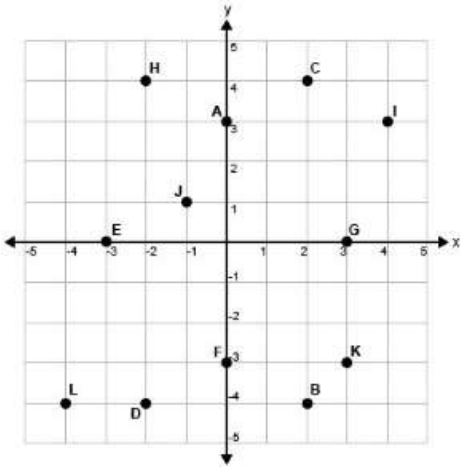
12) Find the coordinates of the following points.

A) _____ B) _____ C) _____

D) _____ E) _____ F) _____

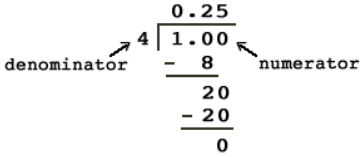
G) _____ H) _____ I) _____

J) _____ K) _____ L) _____



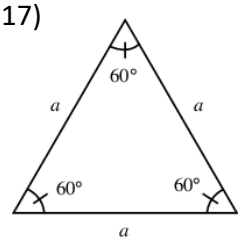

Convert each fraction to a decimal.

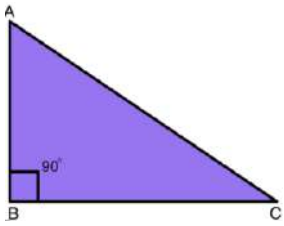
Example: Convert $\frac{1}{4}$ into a decimal through division.

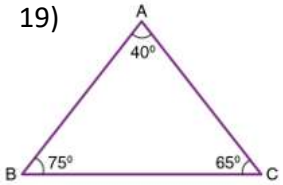


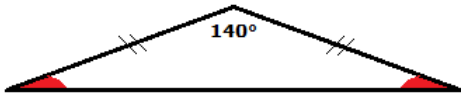

13) $\frac{1}{5}$ = 14) $\frac{3}{8}$ = 15) $\frac{10}{12}$ = 16) $\frac{7}{10}$ =

Classify each triangle below by its angle measures (acute, right, obtuse) and by its side lengths (scalene, equilateral, isosceles).

17) 


18) 


19) 


20) 


Solve.

21) $-6 + 4 =$ _____ 22) $-2 + 7 =$ _____ 23) $-9 - (-4) =$ _____ 24) $14 - 26 =$ _____

25) $-4\,(-5) =$ _____ 26) $\frac{8\,(-4)(-3)}{-6} =$ _____ 27) $-\frac{5}{6}(-\frac{18}{30}) =$ _____

28) A family of 4 paid $72.48 to attend a movie. Given that each ticket costs the same amount, how much did it cost per person?

29) It took Malia $1\frac{1}{2}$ hours to run $6\frac{3}{4}$ miles. How many miles does she run per hour?

Evaluate the expression when a = 3, b = $-2$, c = 4.

30) $bc - a$ 31) $\frac{c}{-2} - a^2$ 32) $-a^4$ 33) $5c - b + a$

Expand and evaluate the following. Example: $2^3 = 2 \times 2 \times 2 = 8$

34) $6^2$ 35) $5^3$ 36) $(\frac{2}{5})^3$ 37) $(\frac{7}{9})^4$

Write an expression.

38) 6 less than the sum of 4 and $n$.

39) 8 more than the quotient of $c$ and 3.