## Algebra 2 Summer assignment

The following topics necessary for algebra 2. Complete each example to assure you are ready for the class. I will be using your work as a pre-test and will be giving you another test within the first two weeks of school.

- add/subtract/multiply/divide fractions
- Solve 1 and 2 step equations
- Long division
- Solve multi-step pemdas
- Add/subtract/multiply/divide integers
- Graph a line with a table of values and an equation
- Develop an equation of a line between two points
- Solve a system of equation in two variables
- Write an equation in standard and slope-intercept form
- Solve proportions with variables

Complete the indicated operation.
a. $1 \frac{2}{3}+5 \frac{6}{21}=$
b. $4 \frac{2}{5}-2 \frac{4}{7}=$
c. $\frac{2}{5} \cdot \frac{4}{7}=$
d. $\frac{2}{5} \div \frac{2}{9}=$

Solve for $x$

$$
\text { a. } 3 x-4=11
$$

$$
\text { b. } \frac{x-1}{2}=10
$$

Use long division to solve the following (show your work).
a. $3250 \div 26=$
b. $0.0828 \div 0.36=$

Complete the indicated operation with integers.
a. $6+(-9)=$
b. $-10-(-11)=$
c. $-10 \div(-5)=$
d. $\frac{-60}{15}=$

Solve the following proportions
$\frac{3}{x}=\frac{15}{5}$
a.

$$
\frac{6}{b-1}=\frac{9}{7}
$$

b.

Graph the following

1) $y=\frac{7}{2} x-2$


## Use a table of values

2) $3 x+5 y=-5$


Develop an equation between the given points. $(-5,2)(5,-4)$

Write the equation in standard form; $y=10 x-2$

State the slope of each line.
a. $(2,9)(8,2)$
$7 x+y=5$
c. $y=-\frac{4}{3} x-1$

