Math 4. Classwork, January $7^{\text {th }}, 2018$
From now on, Homework should be printed at home. It will be created based on the progress made in class and will be available no later than Tuesday night.

Review of the quiz:

## 1. Divisibility by $\mathbf{3}, \mathbf{9}, \mathbf{5}$ and $\mathbf{1 0}$ !!!!!!

## 2. Calculate:

$9+(-6)=$
$9-(-4)=$
$-9-(-2)=$
$-9+(-8)=$
$5 \cdot(-4)=$
$-5 \cdot(-4)=$
$\frac{1}{2}+\frac{3}{8}=$
$\frac{1}{2} x \frac{3}{8}=$ $\frac{6}{9} \div \frac{18}{27}=$
3. Write the coordinates of points $\mathrm{A}, \mathrm{B}$ and C marked on the number line below:

4. At the party, all kids were given identical gift-bags with fruits. Altogether these bags contained 68 toys and 102 candies. How many kids came to the party? How many toys and candies were in every bag? (hint- find GCF)
5. Jane and Mary are planting flowers. Jane can plant all flowers in 2 hours, Mary can do it in 3 hours. How many hours they need to plant all flowers together?
6. Jane and Mary are doing fall clean up in a backyard. Mary can do the job in 6 hours; together they can do it in 4 hours. How many hours does Jane need to clean up the backyard?
7. Compute using two different methods, first using the distributive property and then just using order of arithmetic operations:

Example:

$$
\begin{gathered}
3 \cdot(12+8)=3 \cdot 12+3 \cdot 8=36+24=60 \\
3 \cdot(12+8)=3 \cdot 20=60
\end{gathered}
$$

$4 \cdot\left(\frac{1}{2}+\frac{3}{8}\right)=$
$4 \cdot\left(\frac{1}{2}+\frac{3}{8}\right)=$
$\left(\frac{7}{8}-\frac{3}{4}\right) \cdot 2=$
$\left(\frac{7}{8}-\frac{3}{4}\right) \cdot 2=$
8. Using the distributive property rewrite the following expressions without parenthesis:
$2 \cdot(2+x)=$
$\left(\frac{1}{2}-a\right) \cdot 2=$
$(a+c) \cdot 3=$
$5 x(3+y)=$
$x(5 a+b)=$
$200 \cdot(x+a)=$
9. Compute using the distributive property, factoring out the common factor:
$6 \cdot 65+6 \cdot 35=$
$8 \cdot 2+8 \cdot 92=$
$356 \cdot 73+644 \cdot 73=$
$\frac{1}{2} \cdot 387+\frac{1}{2} \cdot 613=$
10. Simplify the following expressions:

$$
\begin{aligned}
& m-(n+m)= \\
& -(n-x)-x= \\
& p+(-m+k-p)= \\
& -a-(m-a+p)= \\
& -(m-a)-(k+a)= \\
& m+(k-a-m)= \\
& m-(a+m)-(-a-m)= \\
& a-(a-b)=
\end{aligned}
$$

11. Solve the following equation:

$$
\frac{1}{3} x+12=x
$$

$$
6 x-14=-5 x-3
$$

$$
-(a+4)-19=7
$$

$$
2 \frac{1}{3}-\left(y-\frac{5}{12}\right)=1 \frac{3}{4}
$$

1. ABCD is a rectangle. Find the coordinates of point D and draw the rectangle.
a. $\mathrm{A}(-9 ; 2), \mathrm{B}(-9 ; 4), \mathrm{C}(-3 ; 4)$
b. $\mathrm{A}(-6 ; 0), \mathrm{B}(-6 ;-7), \mathrm{C}(0 ;-7)$

