# Algebra 12018 <br> <br> Summer Packet 

 <br> <br> Summer Packet}
*This review packet is worth extra credit if completed and handed in at the beginning of your first class of Algebra 1.
*You will be quizzed on the topics contained within this review packet in your Algebra 1 class.

Name: $\qquad$
Date: $\qquad$
Period: $\qquad$

## Topic \#1 Operations with Signed Numbers

When you take your quiz, you will not be allowed the use of a calculator. If you need assistance, use the vertical number lines on each page and not a calculator to complete these problems. Note, you can also extend the number line if needed.

## Adding and Subtracting Integers

$8+12=$
$-2+13=$
$-8+-15=$

| $\left[\begin{array}{c} 10 \\ 9 \end{array}\right.$ | $-5+3=$ | $10+-2=$ | $-2+3=$ |
| :---: | :---: | :---: | :---: |
| - 8 |  |  |  |
| - 7 | $-3+2=$ | $-14+3=$ | $10+7=$ |
| - 6 |  |  |  |
| - 4 |  |  |  |
| - 3 | $-15+-2=$ | $-8+-4=$ | $15+-4=$ |
| - 2 |  |  |  |
| - 1 |  |  |  |
| - 0 | $13-8=$ | 13--2 = | $1-5=$ |
| - -1 |  |  |  |
| - -2 |  |  |  |
| - -3 | $9--5=$ | $-3--2=$ | $-15-10=$ |
| - -4 | $9--5=$ | $-3--2=$ | $-15-10=$ |
| - -5 |  |  |  |
|  |  |  |  |
| - -7 | 11-12= | --12-10 = | $8-11=$ |
|  |  |  |  |
| - -9 |  |  |  |
| - -10 | _-3-2 = | $14--10=$ | $-8-3=$ |

$12 \times(-6)=$
$2 \times(-2)=$
$(-5) \times 6=$
$2 \times 10=$
$0 \times 9=$
$4 \times(-1)=$
$(-2) \times(-8)=$
$4 \times(-10)=$
$9 \times 3=$
$(-60) \div(-5)=$
$(-40) \div 8=$
$(-10) \div 2=$
$(-4) \div(-4)=$
$(-12) \div 6=$
$(-35) \div(-7)=$
$16 \div 8=$
$84 \div(-12)=$
$(-20) \div(-2)=$

Simplifying Fractions

$$
\begin{array}{llll}
\frac{12}{28} & = & \frac{36}{48}= & \frac{7}{28} \\
\frac{24}{27}= & \frac{3}{9} & = & \frac{10}{15}
\end{array}
$$

## Adding and Subtracting Fractions

$\frac{3}{4}+\frac{1}{16}$
$\frac{2}{5}+\frac{1}{10}$
$\frac{1}{4}+\frac{1}{2}$
$\frac{3}{14}+\frac{1}{3}$
$\frac{1}{19}+\frac{1}{2}$
$\frac{1}{2}+\frac{3}{16}$
$\frac{17}{18}-\frac{4}{9}$
$\frac{2}{3}-\frac{1}{17}$
$\frac{2}{3}-\frac{3}{8}$
$\frac{10}{11}-\frac{1}{2}$
$\frac{5}{8}-\frac{4}{9}$
$\frac{2}{5}-\frac{1}{3}$

## Multiplying Fractions

$\frac{15}{7} \times \frac{5}{9}$
$5 \times \frac{7}{2}$
$\frac{3}{2} \times \frac{11}{3}$
$\frac{6}{7} \times \frac{9}{2}$
$1 \times \frac{12}{5}$
$3 \times \frac{7}{4}$

## Dividing Fractions

$$
\begin{array}{lll}
\frac{5}{2} \div \frac{20}{7} & 5 \div \frac{5}{3} & \frac{9}{5} \div \frac{9}{2} \\
\frac{5}{7} \div 4 & 1 \div \frac{19}{10} & \frac{7}{4} \div \frac{15}{8}
\end{array}
$$

Topic \#2 One and Two Step Equations

1. $\frac{c}{7}=6$
2. $50=5 \mathrm{k}$
3. $10=-5+a$
4. $-4 n=44$
5. $-7=\frac{z}{7}$
6. $r+3=6$

$$
\text { 7. }-10=-2+f
$$

$$
\text { 8. } 4 y=-24
$$

9. $54=6 \mathrm{~h}$
10. $-13=v-7$
11. $2+4 x=10$
12. $2 x-6=8$
13. $3 x-2=16$
14. $-5+5 x=10$

## Topic \#3 Order of Operations

$\square$
15. $(6+2)^{2}+(6-12 \div 3)$
16. $(9+30-3) \div 2-6^{2}$
17. $(16+6) \times(14+5)-5^{2}$
18. $\left(8+49-5^{2}\right) \div(4+4)$
19. $9 \times\left(5 \times 8+8^{2}\right)-7$
20. $(20+8) \times(9+5)-6^{2}$
21. $\left(8+56-2^{2}\right) \div(11-7)$
22. $(14+16-6) \div 12+5^{2}$

