$\qquad$
$\qquad$
$\qquad$

## Algebra I <br> Chapter 2 Introduction Notes

## Rewrite each function using function notation.

1. Rewrite the function $y=3 x-8$ using function notation so that the dependent quantity, defined as $f$, is a function of the independent quantity $x$.
2. Rewrite the function $y=3 x^{2}+6 x-1$ using function notation so that the dependent quantity, defined as $C$, is a function of the independent quantity $x$.
3. Rewrite the function $y=3^{x}+8$ using function notation so that the dependent quantity, defined as $P$, is a function of the independent quantity $x$.
4. Rewrite the function $l=|n-2|$ using function notation so that the dependent quantity, defined as $L$, is a function of the independent quantity $n$.
5. Rewrite the function $d=-\frac{1}{2} m+5$ using function notation so that the dependent quantity, defined as $A$, is a function of the independent quantity $m$.

## Evaluate each of the following:

1. $2 a+4$ when $a=5$
2. $3 w-2$ when $w=-8$
3. $f(x)=4 x+9$ when $x=2$
4. $f(x)=2 x-4$ when $x=-1$

## Solve each equation.

1. $x-4=-9$
2. $\frac{n}{6}=5$
3. $5 c=-15$
4. $6 a+2=-4$
5. $\frac{r}{4}+3=9$
6. $3(k+8)=21$

Substitute and solve for $x$ in each of the following:

1. $f(x)=x-4$ when $f(x)=10$
2. $f(x)=2 x+28$ when $f(x)=328$
3. $f(x)=4 x-10$ when $f(x)=86$
4. $f(x)=x+4$ when $f(x)=2 x-8$
