Algebra 1 Quiz

1) Simplify: $2(6 x+4)-3(3 x-9)$
$\qquad$
$\qquad$

## 2) Graph the system linear inequalities

$$
\begin{gathered}
y<-x+3 \\
y \geq 1
\end{gathered}
$$

3) Solve the system of linear equations


$$
\begin{gathered}
5 x-12 y=-16 \\
-3 x+4 y=0
\end{gathered}
$$

4) Solve and graph on a number line $\frac{1}{2} x-\frac{2}{3}>4$
5) Perimeter Question: A rectangle garden has a length of $3 x-3$ and a width of $x+4$ and a perimeter of 58 feet. What is the length and width of the garden to the nearest foot?

## Bonus!! Solve the system

$$
\begin{gathered}
4 y=-12 x+16 \\
3 x+y=4
\end{gathered}
$$

