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

## Solving Linear Inequalities <br> Homework

1. Solve the inequality using the properties of inequality and graph the final solution set on the number line provided.
(a) $5 x-6 \leq 24$

$$
\begin{aligned}
\frac{+6}{5 x} & \leq \frac{30}{5} \\
x & \leq 6
\end{aligned}
$$

$$
\curvearrowleft
$$

(b) $2(5-x) \leq 12$

$$
\begin{array}{r}
10-2 x \leq 12 \\
-\frac{10}{-2 x} \leq \frac{-10}{-2} \\
x \geq-1
\end{array}
$$

$$
\text { (c) } 6-4 x>18
$$

$$
-6 \quad-6
$$

$$
\frac{-4 x}{-4}>\frac{12}{-4}
$$

$$
x<-3
$$

