$\qquad$ Per $\qquad$

## Systems of Equations and Inequalities Practice

1. Solve the system by graphing

$$
\begin{aligned}
& y=3 x-1 \\
& y=-x+3
\end{aligned}
$$


2. Solve the system by graphing
$-x+2 y=-2$
$y=\frac{1}{2} x+3$


Solve each system by substitution.
3. $y=3 x+11$
$y=-2 x+1$
4. $\begin{aligned} & 4 x-y=-12 \\ & -6 x+5 y=-3\end{aligned}$
5. $\begin{gathered}y=5 x-8 \\ 5 y=2 x+6\end{gathered}$

Solve each system using elimination.
6. $y=-3 x+5$

$$
y=-4 x-1
$$

7. $\begin{aligned} & 2 x-3 y=5 \\ & x+2 y=-1\end{aligned}$
8. $\begin{aligned} & x+4 y=12 \\ & 2 x-3 y=2\end{aligned}$

$$
\text { 9. } \begin{aligned}
& 3 x-3 y=3 \\
& x=y+1
\end{aligned}
$$

Graph each inequality.
10. $y \geq 4 x-5$

11. $y<-3 x+5$

12. $y>-\frac{2}{3} x-1$

13. $\begin{aligned} & y<2 x+4 \\ & -3 x-2 y \geq 6\end{aligned}$

14. $y \leq-\frac{1}{3} x+7$
$y \geq-x+1$


## Bonus

Write the inequality that has the solution described.
The point $(7,12)$ and $(-3,-8)$ lie on the boundary line, but neither point is a solution. The point $(1,1)$ is also a solution.

