Name:
Date: $\qquad$
Graphing Systems of Inequalities Homework

1. $3 x+y \geq 5$

2. $x+y>2$
$2 x-y>1$

3. $y \geq 2$
$y<2 x-1$

4. $2 x-y<6$

5. $3 x+y \geq-3$
$x+2 y \leq 4$

6. $y \geq \frac{1}{3} x-2$
$y>-x+2$

7. Mikayla decide to work two jobs over the summer to save for college. She makes $\$ 15$ per hour for babysitting her neighbor's kids and $\$ 9$ per hour at the local pool. Mikayla wants to make at least $\$ 225$ per week and wants to work more than 20 hours each week.
A. Define your variables.
B. Write a system of inequalities that represents the scenario.
C. Graph the system. Be sure to label your axes.
D. Write two possible solutions using full sentences based on the graph.


## Review

8. Which value of $k$ would create a system with no solution?

$$
\begin{aligned}
& \mathrm{y}=-5 \mathrm{x}+1 \\
& \mathrm{y}=k \mathrm{x}-3
\end{aligned}
$$

A. 5
B. 1
C. -5
D. -3
9. Wilson and Amaya are selling cookie dough for a school fundraiser. Wilson sold 5 packages of chocolate chip cookie dough and 12 packages of oatmeal cookie dough for $\$ 301$. Amaya sold 4 packages of chocolate chip and 4 oatmeal for a total of $\$ 140$. Find the cost of each type of cookie dough.

