## Sketch a graph of the linear inequalities.


2. $y>-3$


4. $3 x+y \leq 6$

6. $y<3$




## 7. $x \leq-2$

8. $-2 x+3 y>-9$
9. $-6 x+2 y<-4$



## True or False?

34. 2 is a solution to the inequality $\mathbf{3} \geq \boldsymbol{x}$.
35. $(\mathbf{0}, \mathbf{3})$ is a solution to the inequality

36. $(\mathbf{3}, 8)$ is a solution to $\frac{\mathbf{1}}{3} x+10<y$
37. 18 is a solution to the inequality $\boldsymbol{x}+\mathbf{3} \leq \mathbf{2 1}$
38. $(\mathbf{2},-\mathbf{3})$ is a solution to the inequality

39. $(1,-2)$ is a solution to $4 x-2 y>8$.
40. Josh is going on a trip to visit some friends from summer camp. He will use $\$ 40$ for food and entertainment. He will also need money to cover the cost of gas. The price of gas at the time of his trip is $\$ 3.25$ per gallon. Josh only has $\$ 170$ for the trip. Fill in the blank below with the appropriate inequality ( $<$, $>, \leq, \geq)$ symbol to represent this situation.
$3.25 x+40$ $\qquad$ 170
41. You are buying pizza for a party. Pepperoni pizza is $\$ 10$ per pizza, and meat lovers pizza is $\$ 15$ per pizza. You want to really impress people and want to spend more than $\$ 200$. Fill in the blank below with the appropriate inequality $(<,>, \leq, \geq)$ symbol to represent this situation.

$$
10 x+15 y \_200
$$

42. You are going to a Super Bowl party and was asked to bring soda and chips. The soda costs $\$ 3.50$ per bottle and the chips are $\$ 2.50$ a bag. If you only have $\$ 30$ to spend, fill in the blank below with the appropriate inequality $(<,>, \leq, \geq)$ symbol to represent this situation.

$$
3.50 x+2.50 y
$$

$\qquad$ 30
43. Jose is going to an arcade that costs $\$ 5$ to enter and $\$ 2$ per game. If Jose only has a $\$ 50$ bill, Fill in the blank below with the appropriate inequality $(<,>, \leq, \geq)$ symbol to represent this situation.

$$
2 x+5 \_50
$$

44. Sam is saving up for a car. His parents give him $\$ 300$ and he is going save $\$ 60$ a week. Write an inequality if he wants to have at least $\$ 4000$ when he goes to buy the car.
45. You are making scrapbooks for your friends. Your mom already made 3 that you are going to use and you can make 2 a day. Write an inequality if you need more than 15 scrapbooks.
46. You work at a movie theater where child tickets are $\$ 4$ each and adult tickets are $\$ 9$. Write an inequality if your manager tells you that you need to sell at least $\$ 600$ worth of tickets one night.
