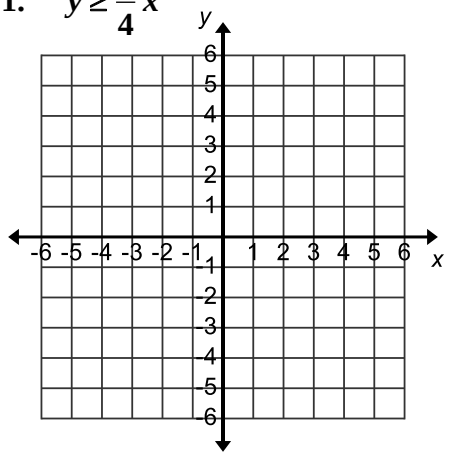
Name: Class:

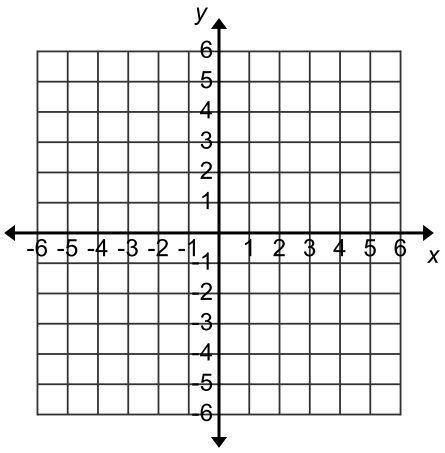
Sec1 **Practice Test 2** **Unit 2**

Sketch a graph of the linear inequalities.

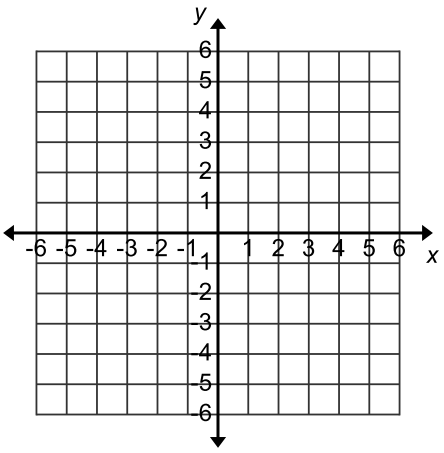
1. $y \geq \frac{3}{4}x$



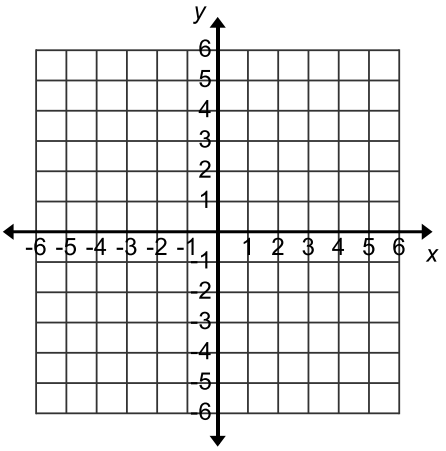
2. $y > -3$



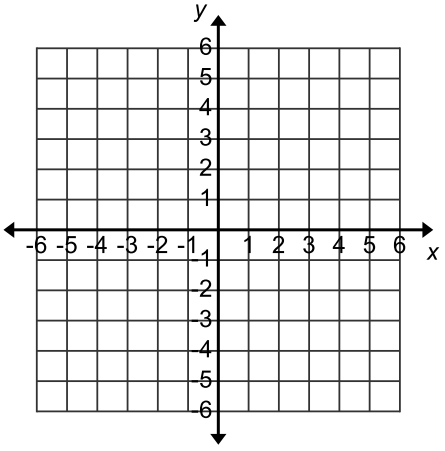
3. $y < 2x - 5$



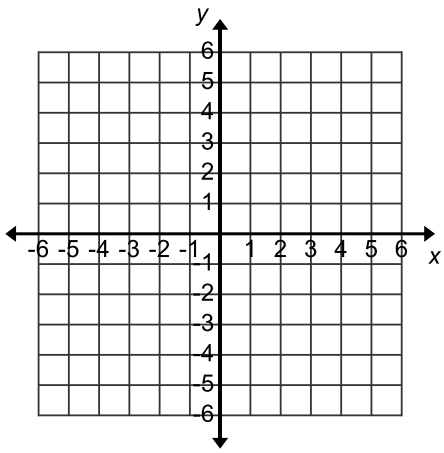
4. $3x + y \leq 6$



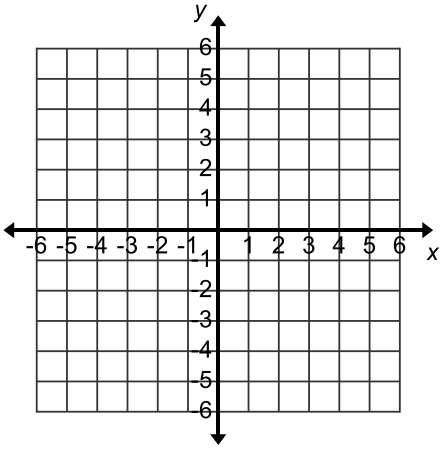
5. $x \leq -2$



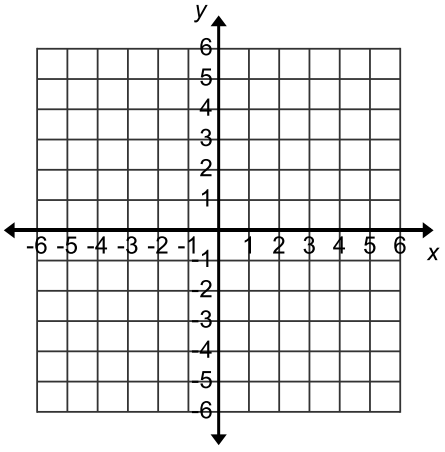
5. $y < 3$



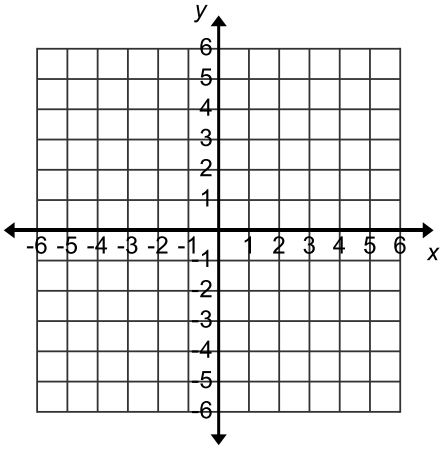
6. $x \leq -2$



7. $-2x + 3y > -9$



8. $-6x + 2y < -4$

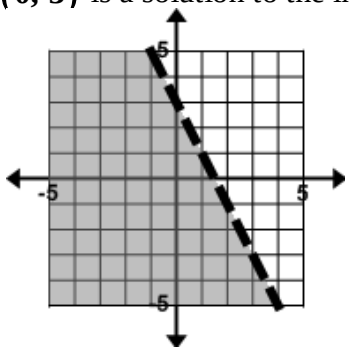


True or False?

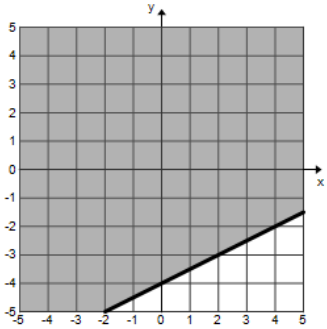
22. 2 is a solution to the inequality $3 \geq x$.

23. 18 is a solution to the inequality $x + 3 \leq 21$

24. $(0, 3)$ is a solution to the inequality



25. **(2, -3)** is a solution to the inequality



26. **(3, 8)** is a solution to $\frac{1}{3}x + 10 < y$

27. $(1, -2)$ is a solution to $4x - 2y > 8$.

28. 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 (<, >, ≤, ≥) symbol to represent this situation.

$$3.25x + 40 \_\_\_ 170$$

29. 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 (<, >, ≤, ≥) symbol to represent this situation.

$$10x + 15y \_\_\_ 200$$

30. 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 (<, >, ≤, ≥) symbol to represent this situation.

$$3.50x + 2.50y \_\_\_ 30$$

31. 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 (<, >, ≤, ≥) symbol to represent this situation.

$$2x + 5 \_\_\_ 50$$

32. 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.

$$300 + 60x \_\_\_\_ 40000$$

33. 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.

$$2x + 3 \_\_\_\_ 15$$

34. 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.

$$4x + 9y \_\_\_ 600$$