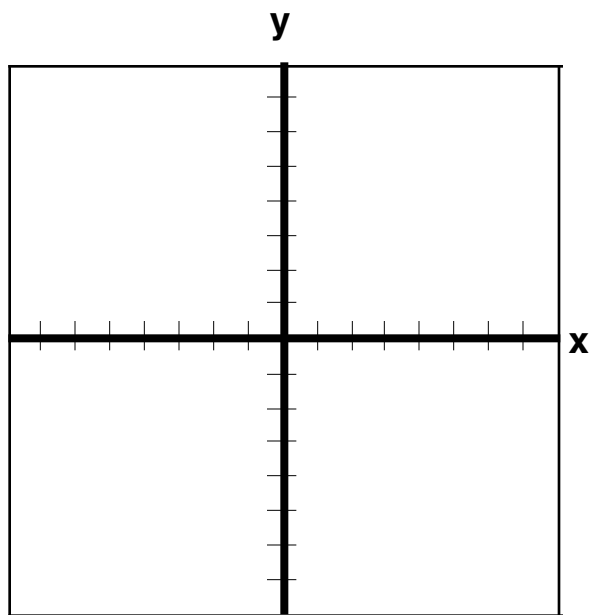


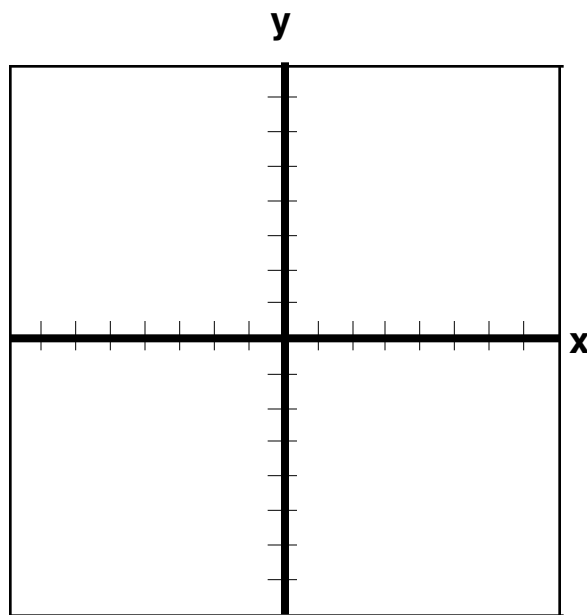
Section 11- 7: Graphing Systems of Nonlinear Inequalities Name _____

Graph each inequality.

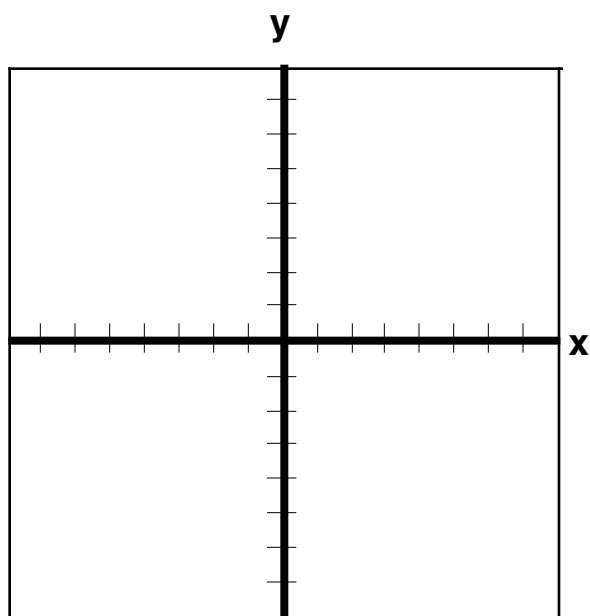
1. $y \geq \frac{3}{5}x - 2$



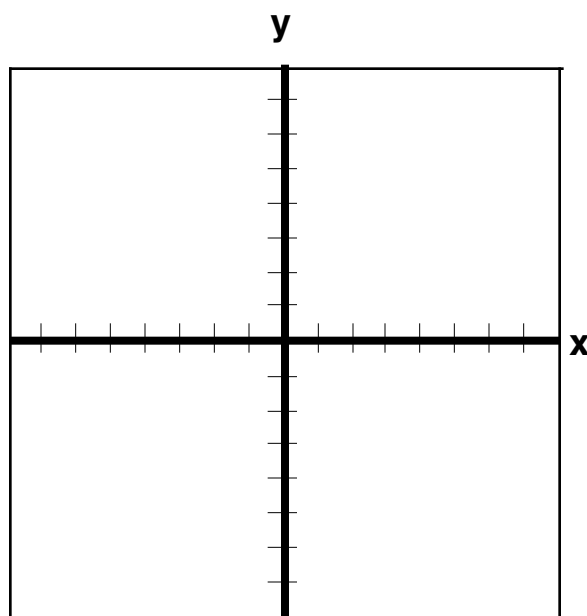
2. $y \leq \frac{-3}{2}x + 4$



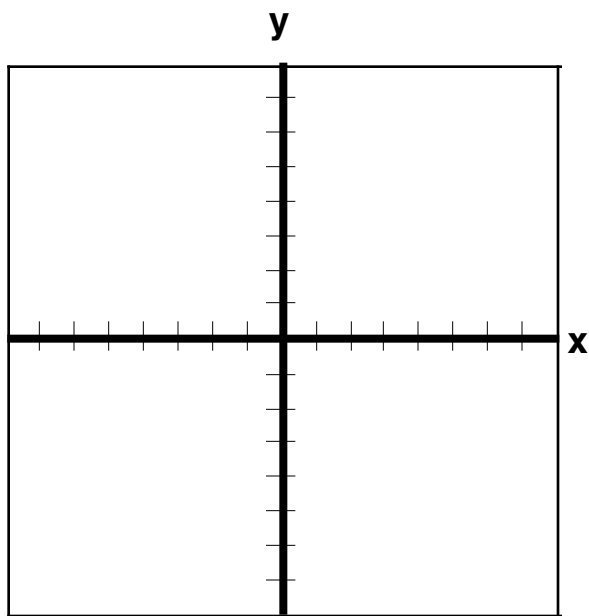
3. $y \geq x^2$



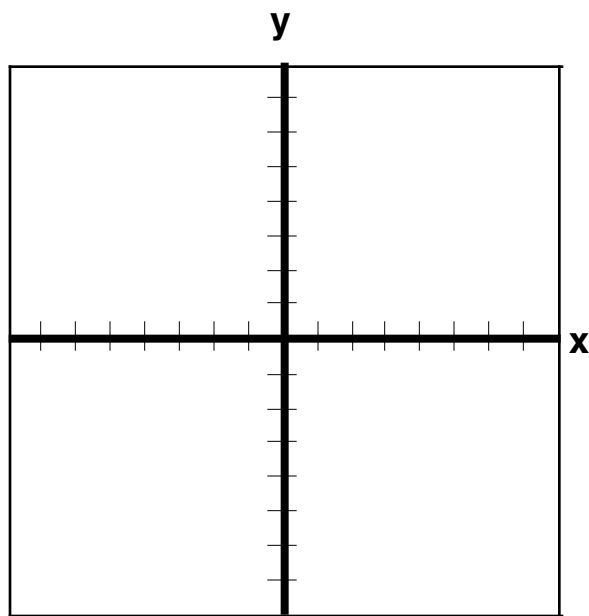
4. $y \leq x^2 + 1$



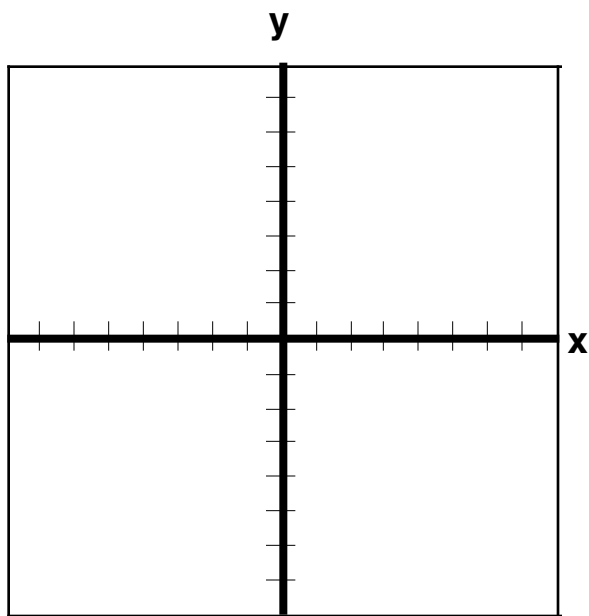
5. $x^2 + y^2 \leq 9$



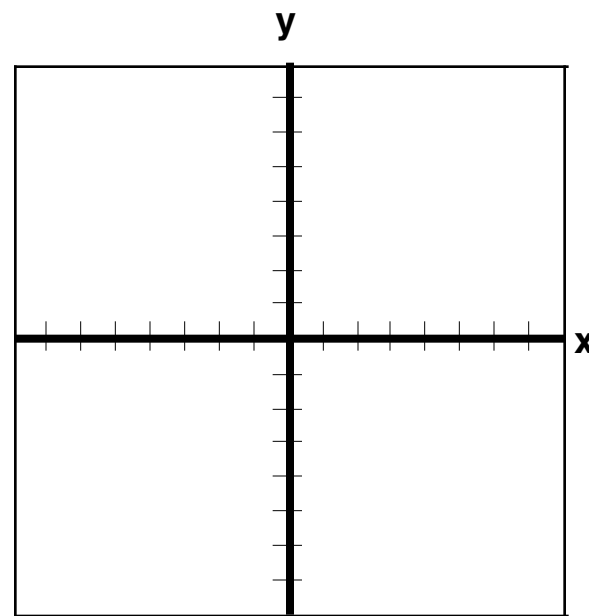
6. $x^2 + y^2 \geq 25$



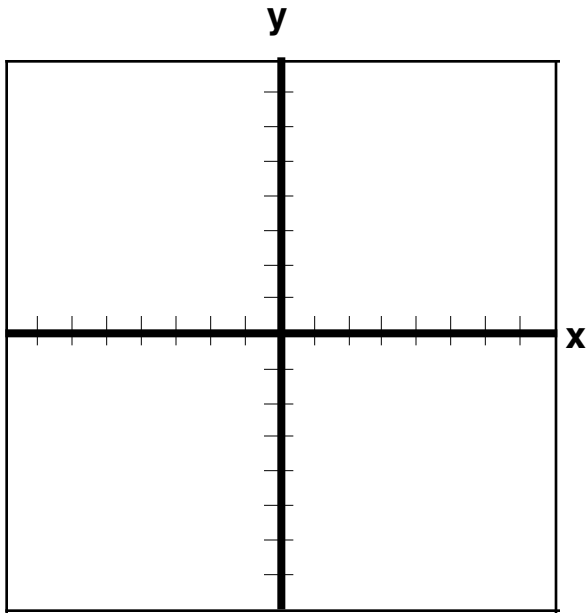
7. $\frac{x^2}{16} + \frac{y^2}{1} \geq 1$



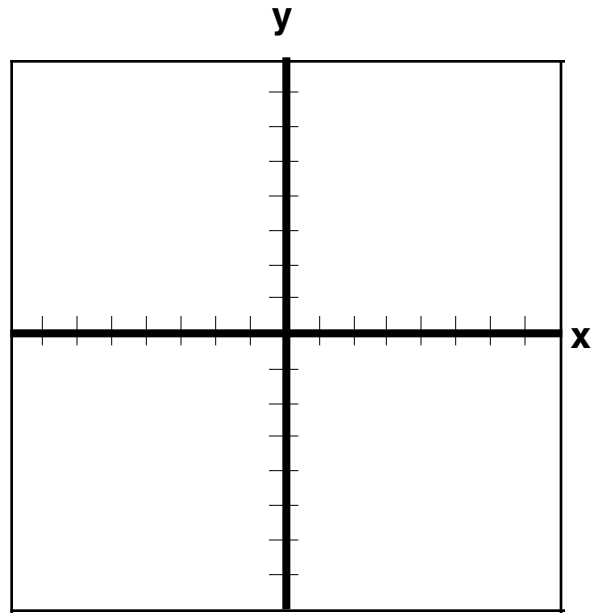
8. $\frac{x^2}{4} + \frac{y^2}{25} \leq 1$



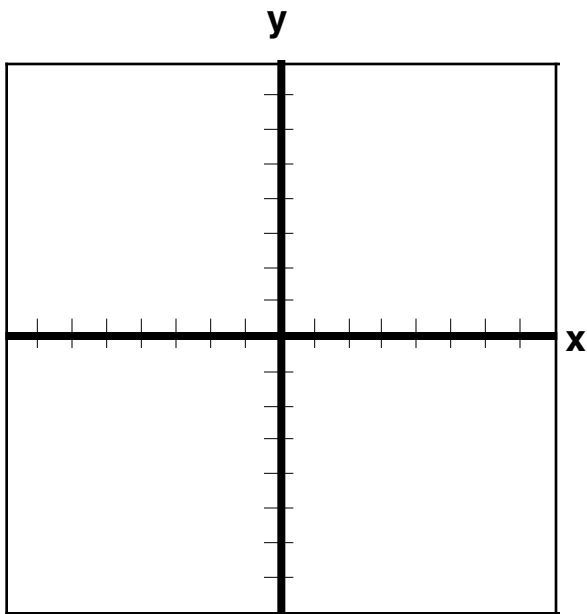
9. $\frac{x^2}{9} + \frac{y^2}{36} \geq 1$



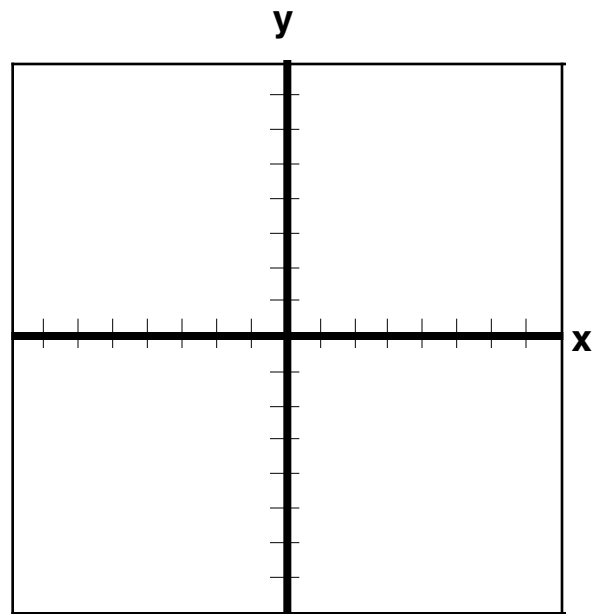
10. $\frac{x^2}{49} + \frac{y^2}{16} \leq 1$



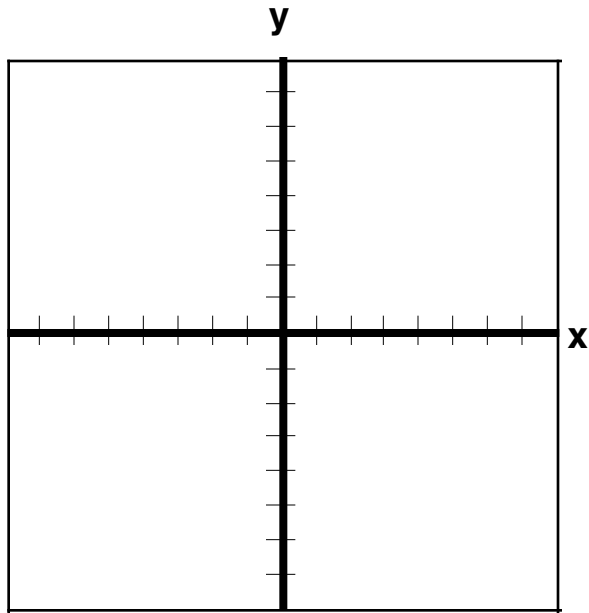
11. $\frac{x^2}{9} - \frac{y^2}{16} \geq 1$



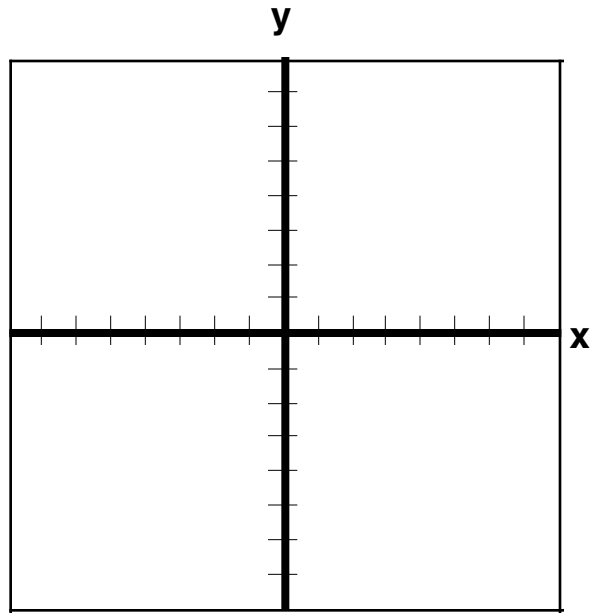
12. $\frac{x^2}{25} - \frac{y^2}{4} \leq 1$



13. $\frac{y^2}{16} - \frac{x^2}{4} \leq 1$

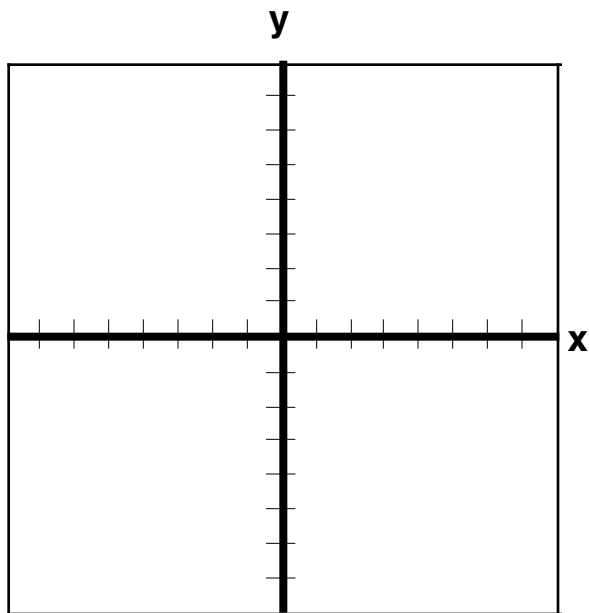


14. $\frac{y^2}{9} - \frac{x^2}{25} \geq 1$

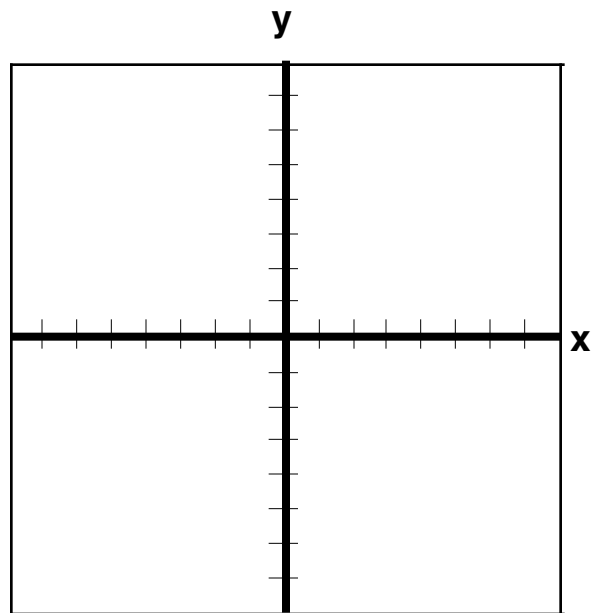


Graph the solution to each **system of nonlinear inequalities**.

15. $x^2 + y^2 \leq 16$
 $y \leq x + 1$



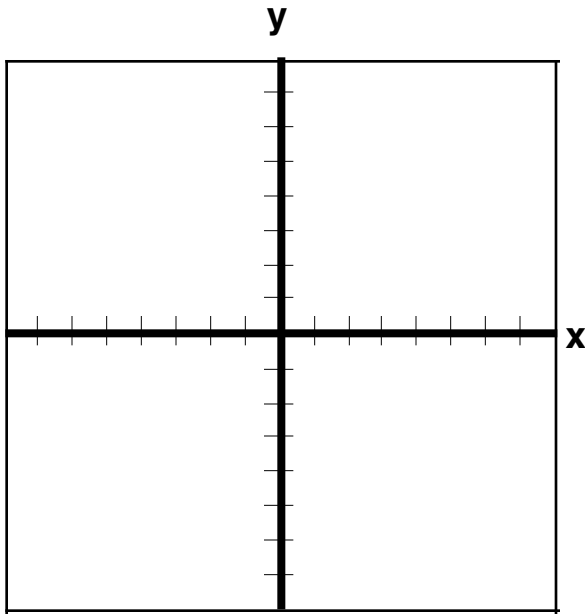
16. $x^2 + y^2 \leq 25$
 $y \geq \frac{2}{3}x - 1$



$$x^2 + y^2 \geq 25$$

17.

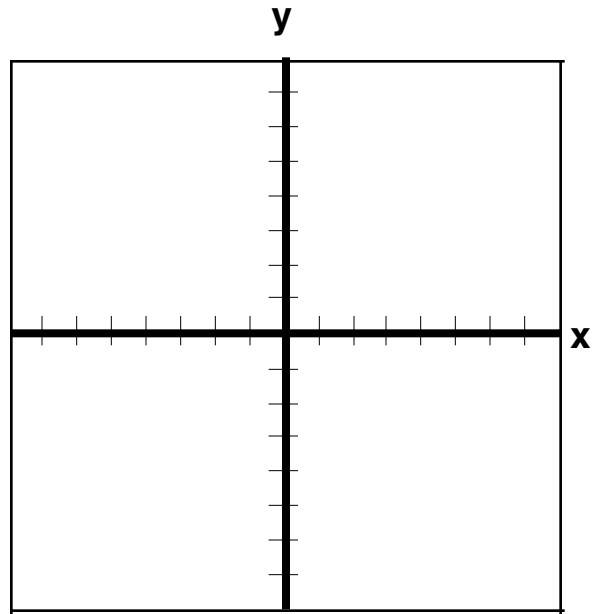
$$y \geq x - 3$$



$$x^2 + y^2 \geq 49$$

18.

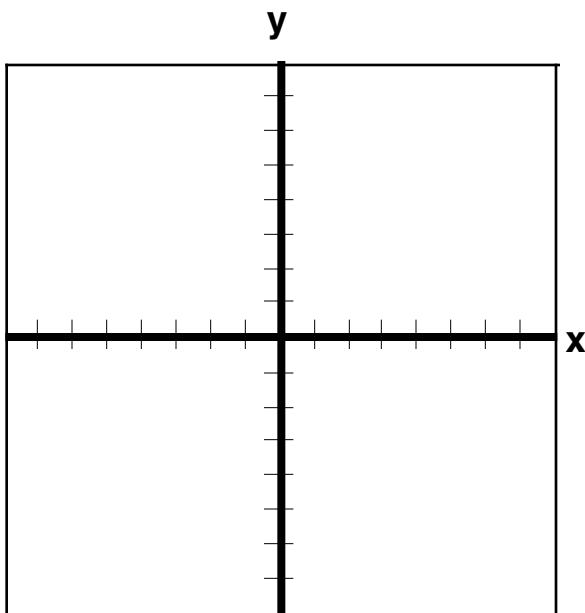
$$y \leq \frac{-1}{2}x + 3$$



$$x^2 + y^2 \leq 9$$

19.

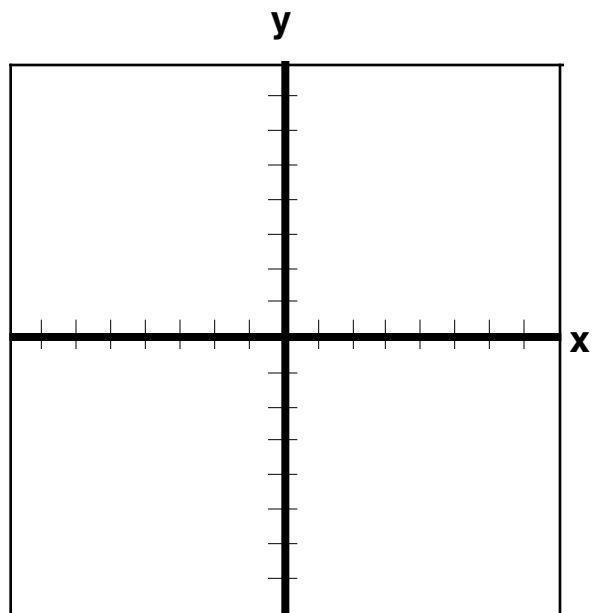
$$y \leq x^2 + 1$$



$$x^2 + y^2 \geq 36$$

20.

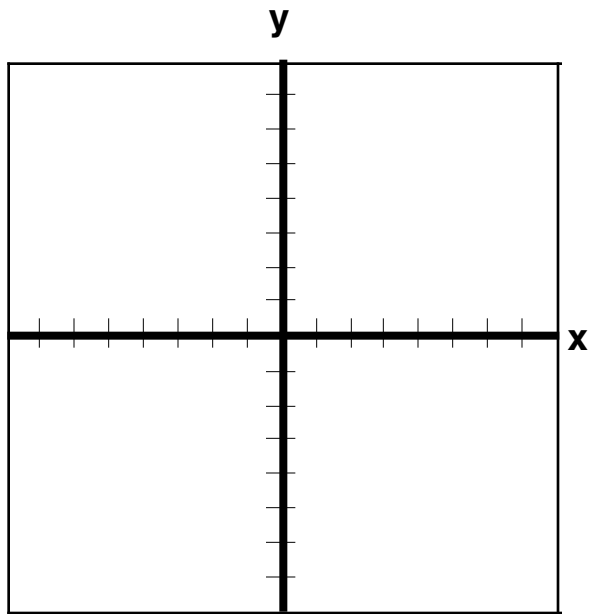
$$y \leq x^2 + 4$$



$$\frac{x^2}{9} + \frac{y^2}{25} \leq 1$$

21.

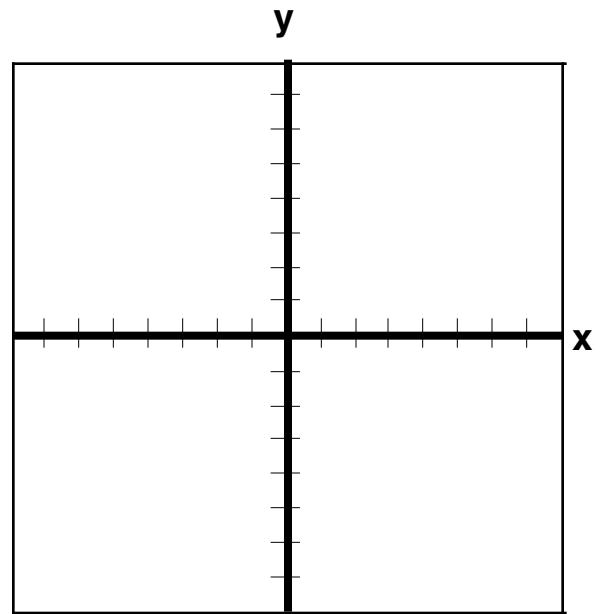
$$y \geq \frac{-2}{5}x + 2$$



$$\frac{x^2}{36} + \frac{y^2}{4} \geq 1$$

22.

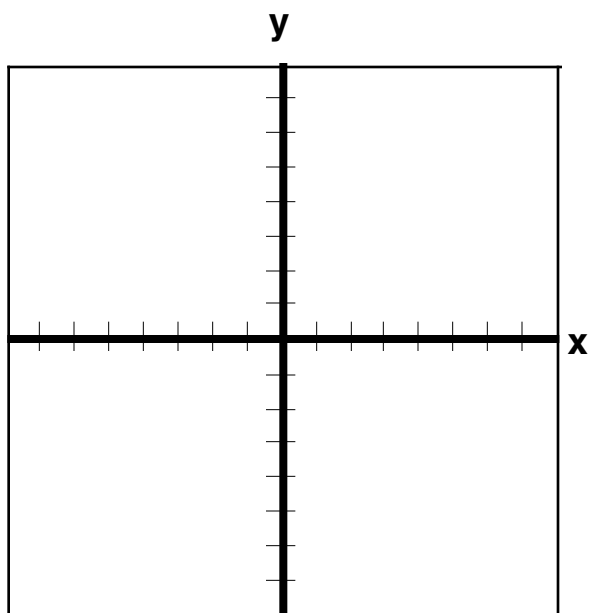
$$y \geq \frac{-5}{3}x + 4$$



$$\frac{x^2}{49} + \frac{y^2}{9} \geq 1$$

23.

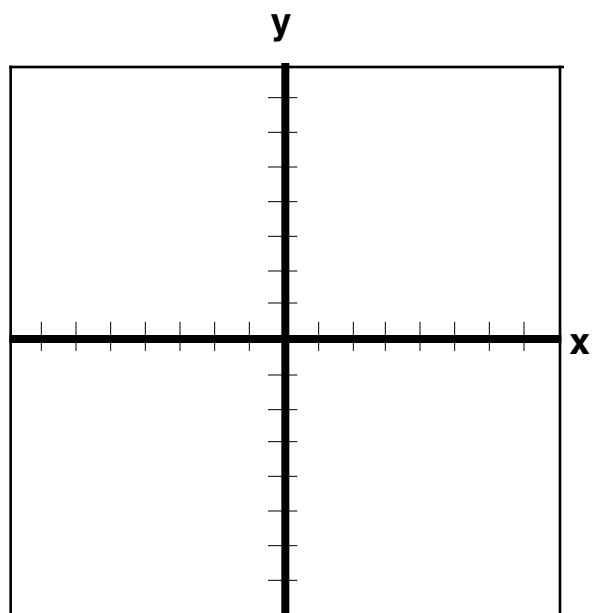
$$y \leq \frac{-2}{3}x$$



$$\frac{y^2}{25} - \frac{x^2}{4} \leq 1$$

24.

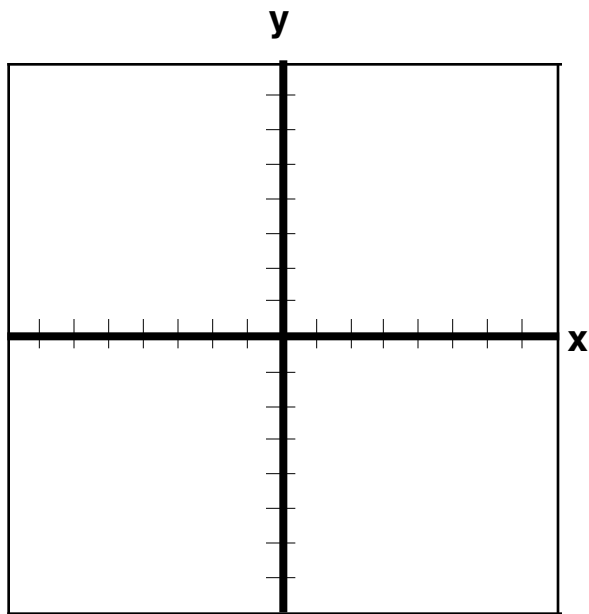
$$y \geq \frac{2}{7}x - 2$$



$$\frac{x^2}{9} - \frac{y^2}{49} \geq 1$$

25.

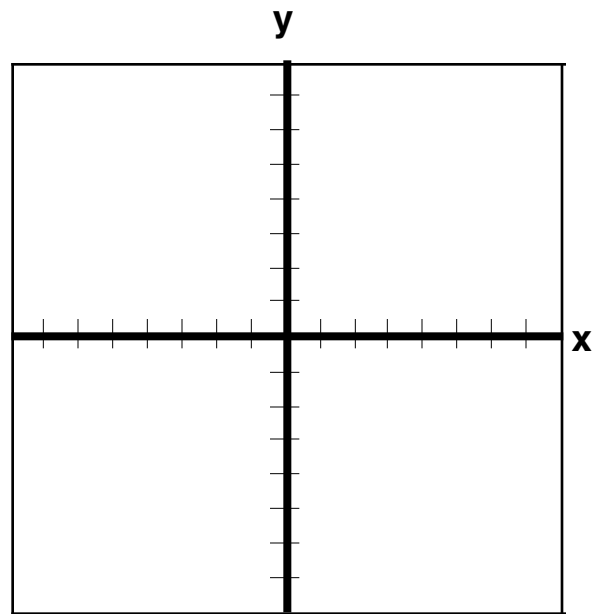
$$x \geq -3$$



$$\frac{y^2}{16} - \frac{x^2}{4} \geq 1$$

26.

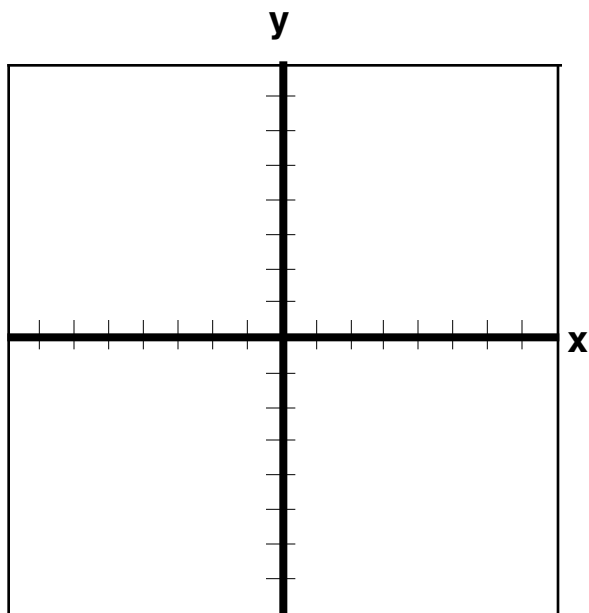
$$x^2 + y^2 \geq 36$$



$$\frac{x^2}{16} - \frac{y^2}{4} \geq 1$$

27.

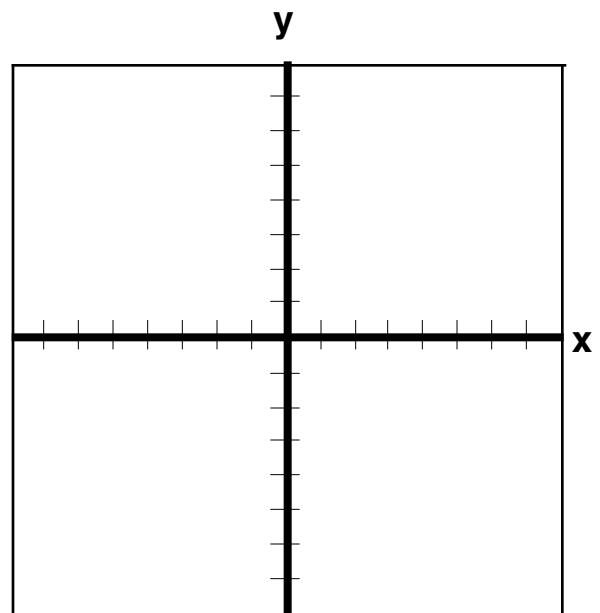
$$x^2 + y^2 \leq 36$$



$$\frac{x^2}{36} - \frac{y^2}{25} \leq 1$$

28.

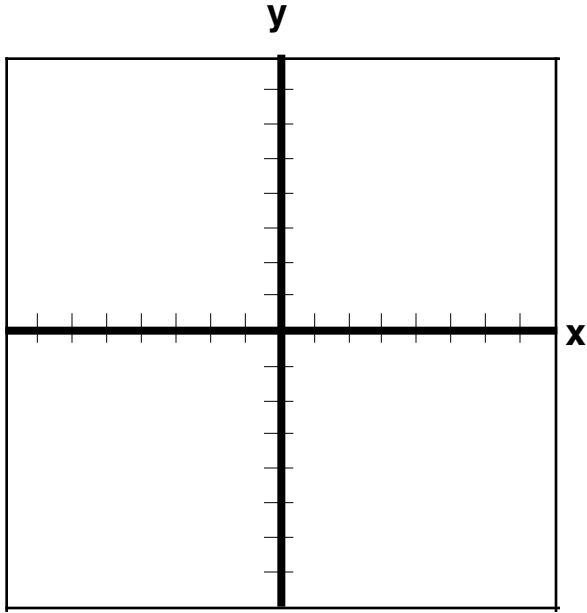
$$x^2 + y^2 \geq 9$$



$$\frac{x^2}{9} + \frac{y^2}{49} \leq 1$$

29.

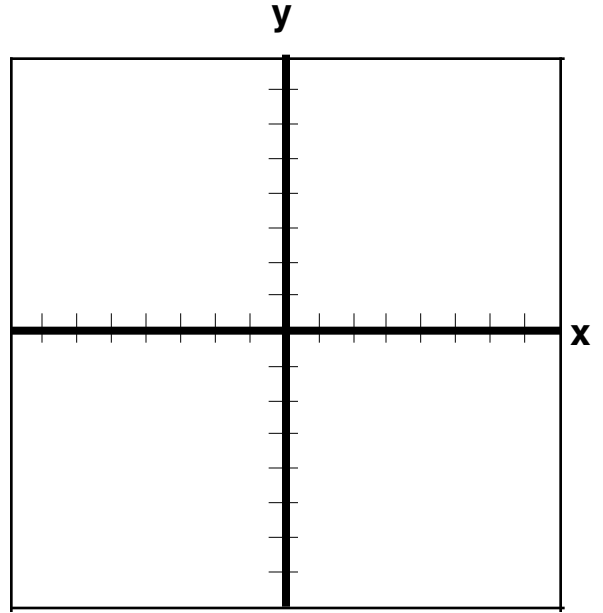
$$\frac{x^2}{36} + \frac{y^2}{16} \geq 1$$



$$\frac{y^2}{36} - \frac{x^2}{25} \leq 1$$

30.

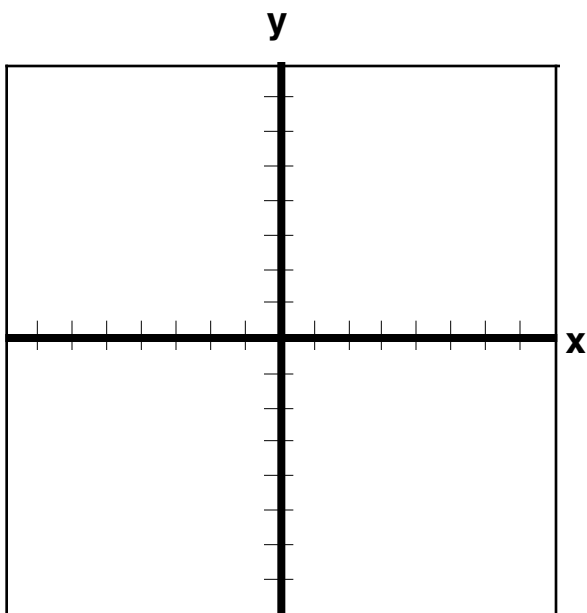
$$\frac{x^2}{9} + \frac{y^2}{16} \geq 1$$



$$\frac{y^2}{49} + \frac{x^2}{25} \leq 1$$

31.

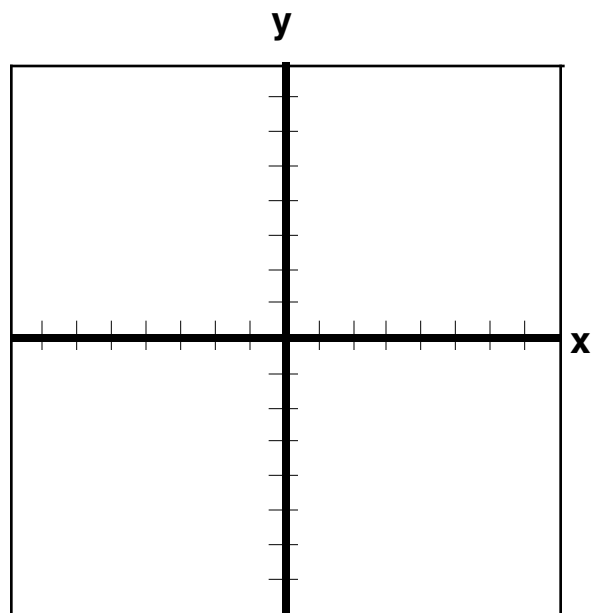
$$x^2 + y^2 \geq 4$$



$$\frac{x^2}{4} + \frac{y^2}{7} \leq 1$$

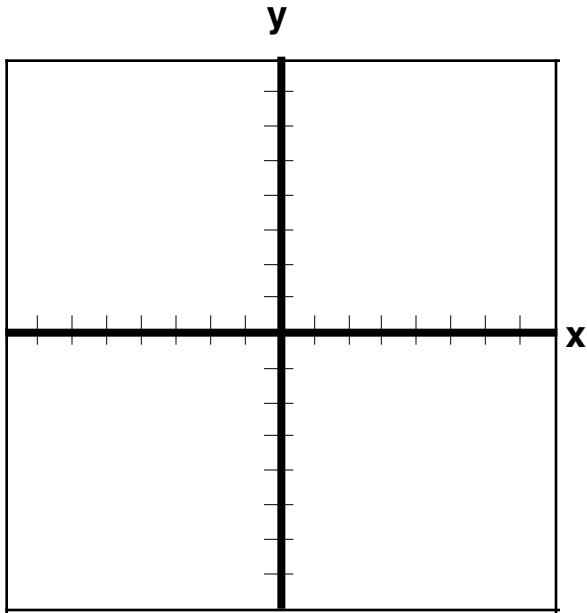
32.

$$\frac{x^2}{36} + \frac{y^2}{9} \leq 1$$



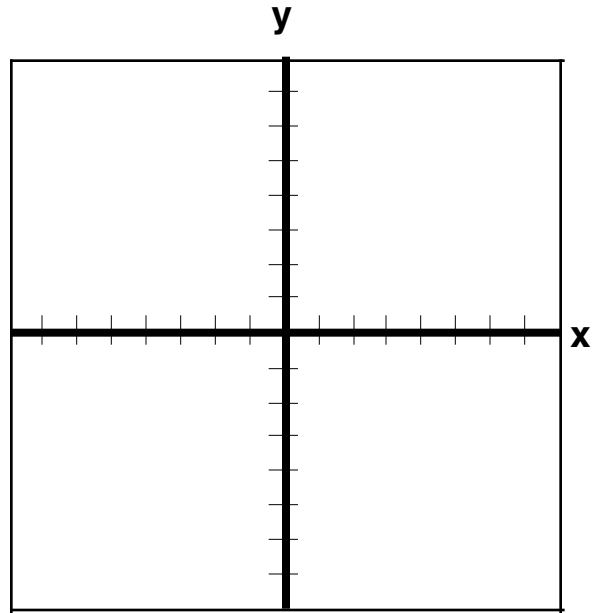
$$\frac{x^2}{9} - \frac{y^2}{4} \leq 1$$

33. $\frac{x^2}{36} + \frac{y^2}{16} \geq 1$
 $y \geq 0$



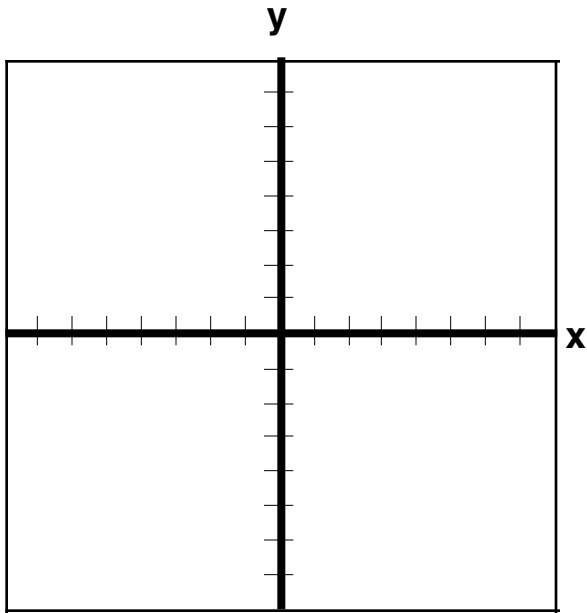
$$\frac{y^2}{36} + \frac{x^2}{16} \leq 1$$

34. $\frac{x^2}{49} + \frac{y^2}{9} \leq 1$
 $x \geq 0$



$$\frac{x^2}{4} - \frac{y^2}{9} \geq 1$$

35. $x^2 + y^2 \leq 25$
 $x \geq 0$
 $y \geq 0$



$$\frac{x^2}{49} + \frac{y^2}{16} \leq 1$$

36. $y \leq x^2 + 2$
 $x \geq 0$
 $y \geq 0$

