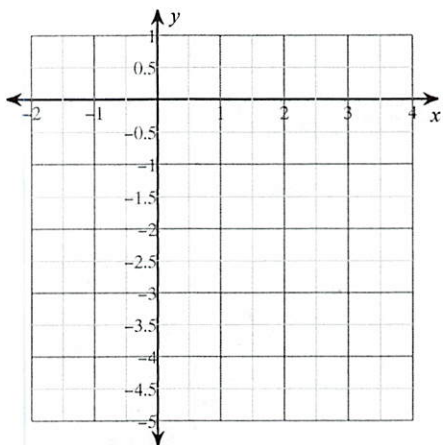


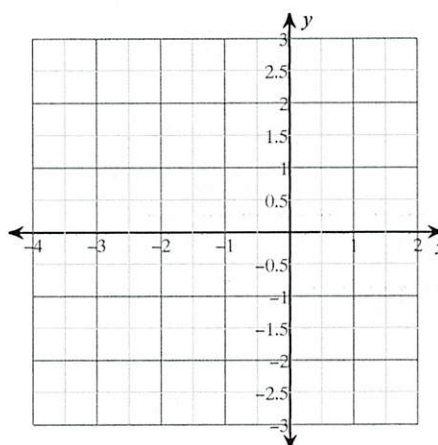
## Section 3.1 Graphing

Sketch the graph of each function.

1)  $f(x) = x^2 - 2x - 3$

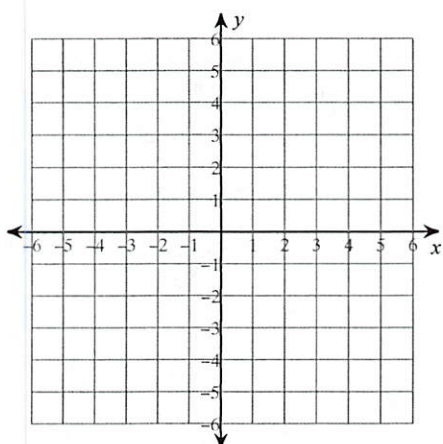


2)  $f(x) = (x + 2)^2 - 2$

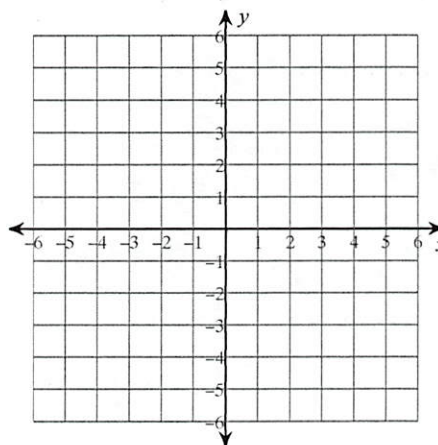


Sketch the graph of each line.

3)  $x - 2y = 6$

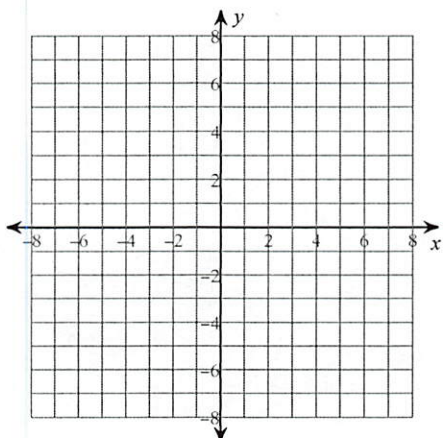


4)  $y = -\frac{5}{3}x + 5$

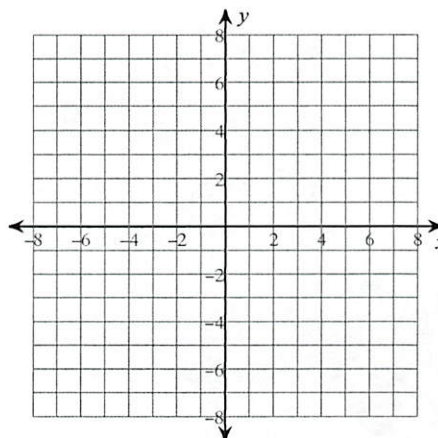


Identify the center and radius of each. Then sketch the graph.

5)  $(x - 2)^2 + (y + 3)^2 = 9$

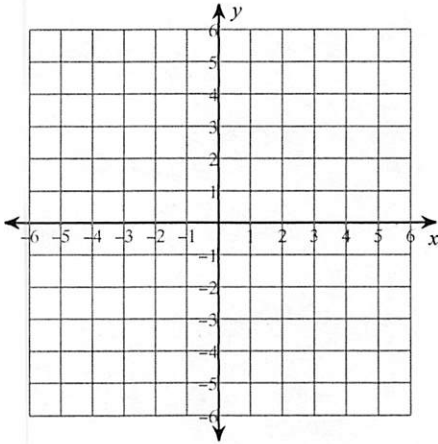


6)  $(x + 2)^2 + (y - 2)^2 = 16$

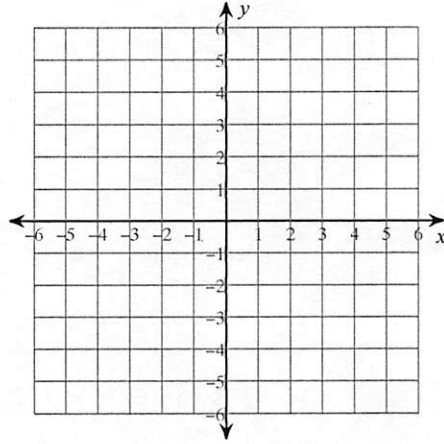


Graph each equation.

7)  $y = 3|x + 1| + 3$

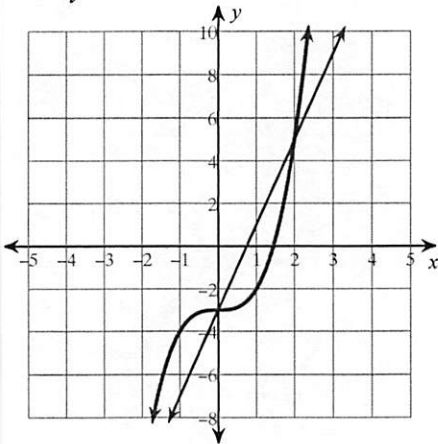


8)  $y = 3|x| - 3$

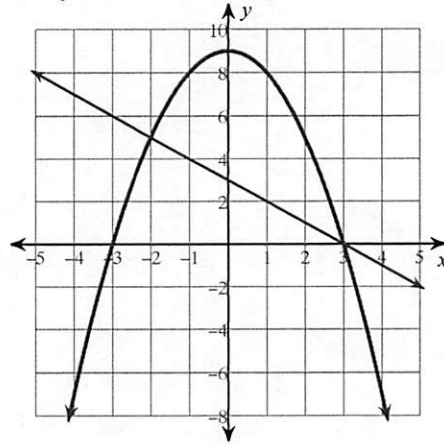


Two equations and their graphs are given. Find the intersection point(s)

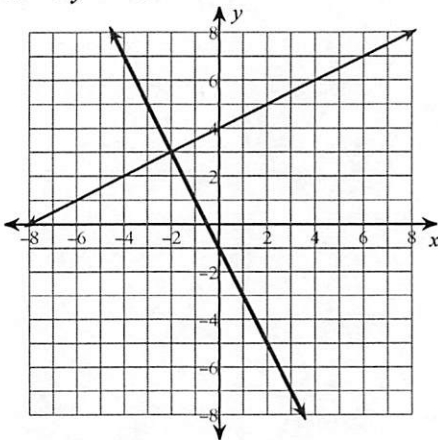
9)  $x^3 - y = 3$   
 $4x - y = 3$



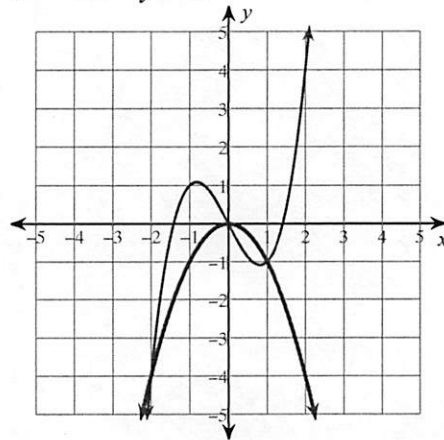
10)  $x^2 + y = 9$   
 $x + y = 3$



11)  $2x + y = 8$   
 $x - 2y = -6$

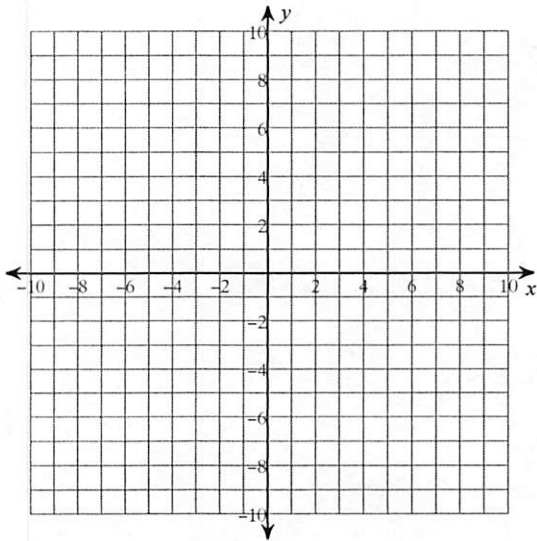


12)  $x^2 + y = 0$   
 $x^3 - 2x - y = 0$

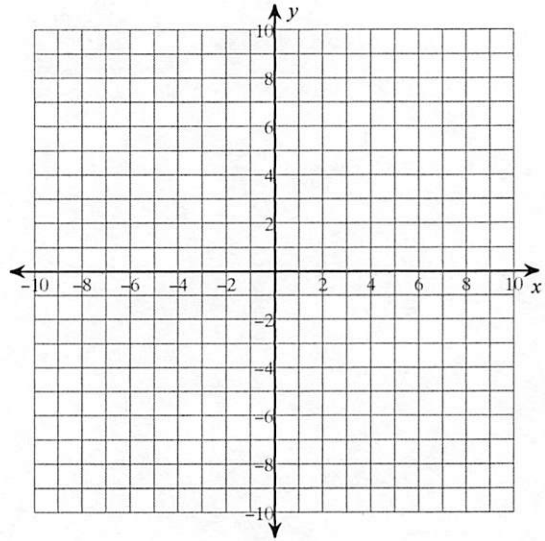


Solve each system by graphing.

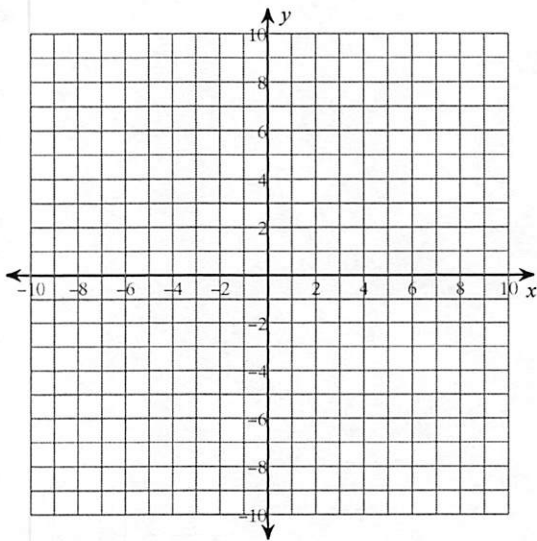
13)  $4x + y = -6$   
 $2x - 3y = -24$



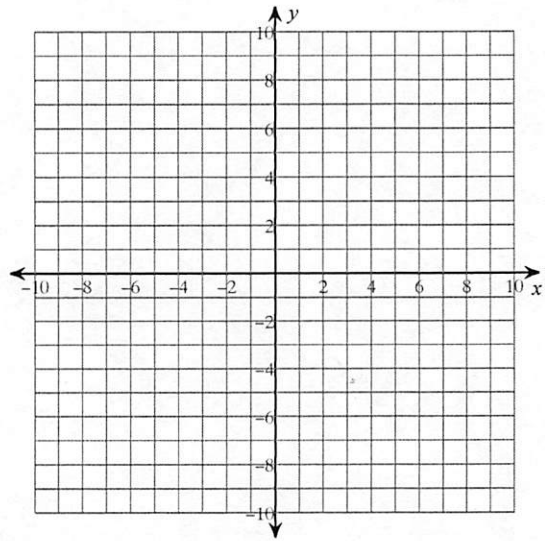
14)  $x + y = -3$   
 $6x + y = 2$



15)  $y = \frac{5}{3}x - 5$   
 $y = \frac{5}{3}x - 1$

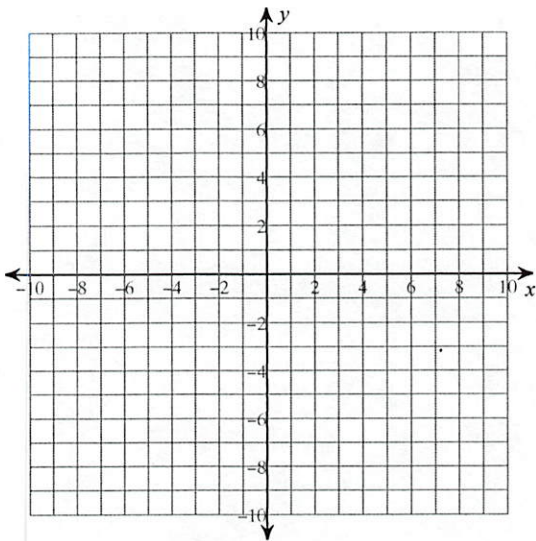


16)  $y = \frac{2}{3}x - 9$   
 $y = -\frac{10}{3}x + 3$



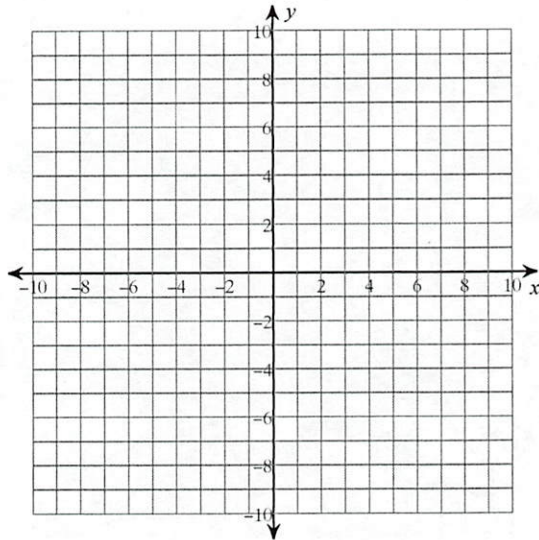
17)  $y = -2x + 1$

$y = \frac{3}{2}x - 6$



18)  $y = \frac{9}{4}x + 9$

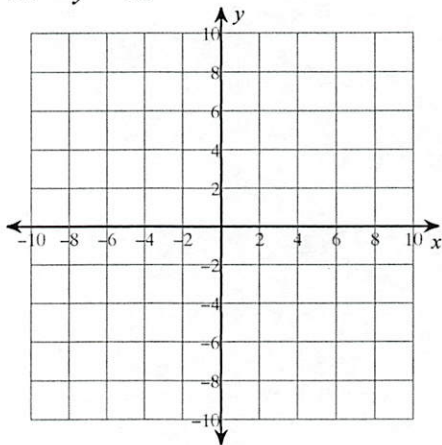
$y = \frac{3}{8}x - 6$



**Graph the equations to find all solutions of the system of equations.**

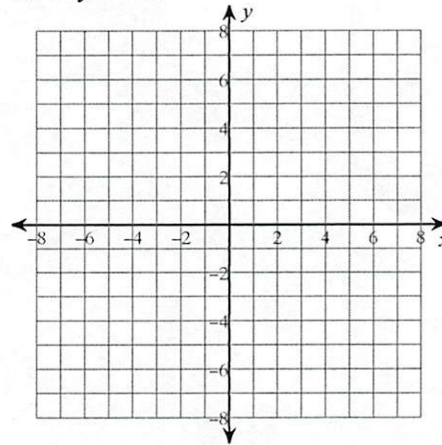
19)  $x^2 + y^2 = 100$

$3x - y = 10$



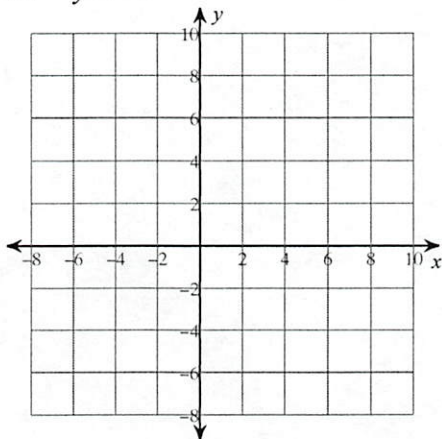
20)  $x^2 - y = 2$

$2x - y = -1$



21)  $x^3 + y = 8$

$2x - y = -5$



22)  $(x - 2)^2 + y^2 = 16$

$y = |x - 2| - 4$

