

1. Write the standard equation of the circle with center C and radius r.

a.  $C(2,5); r=6$

b.  $C(9,-4); r=4$

c.  $(5,0); r=\sqrt{5}$

2. Write the standard equation of the circle with center C passing through point P.

a.  $C(-2,3); P(4,-4)$

b.  $C(10,7); P(-8,-5)$

3. State the center and radius of each circle.

a.  $x^2 + (y-8)^2 = 49$

b.  $(x-5)^2 + (y+9)^2 = 40$

4. Write each circle in standard form. State the center and radius of each.

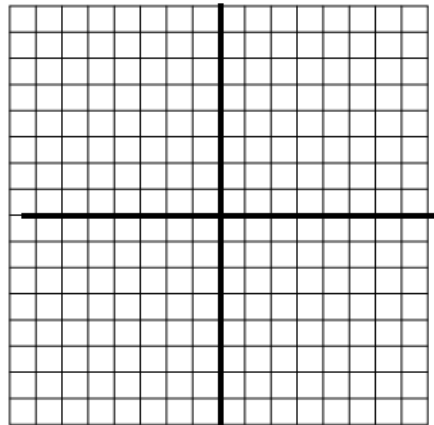
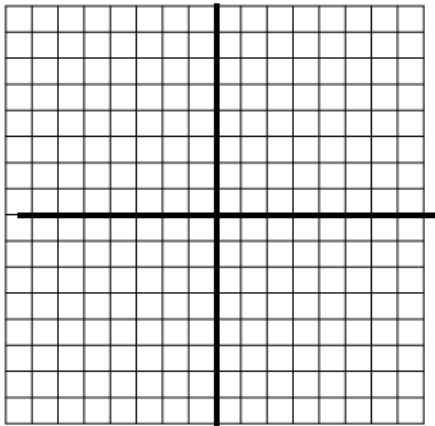
a.  $x^2 + y^2 + 2x - 6y - 39 = 0$

b.  $x^2 + y^2 - 8y - 20 = 0$

Solve each of the following systems of equations graphically.

a.  $y = 2x$   
 $y = 3x - 3$

b.  $y = \frac{1}{3}x - 3$   
 $2x - y = 8$



c.  $x^2 + y^2 = 25$   
 $4y = 3x$

d.  $(x - 4)^2 + y^2 = 25$   
 $x + 2y = -6$

