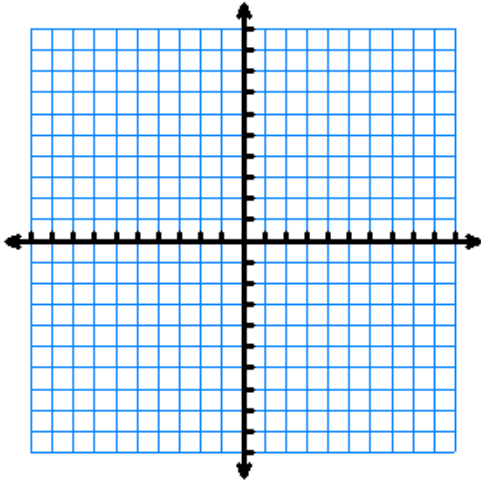


Systems of Conics WS 1  
A Circle and A Line

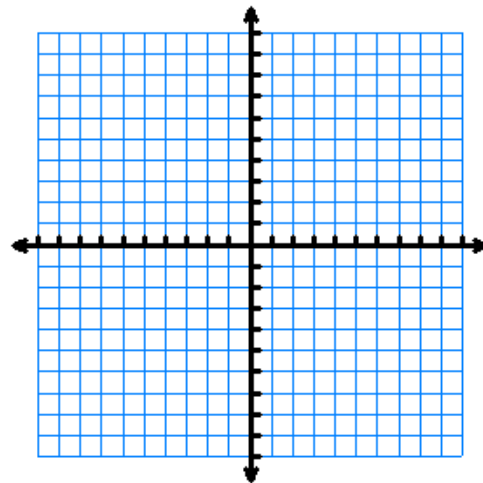
Name \_\_\_\_\_

Solve the system graphically. Find the points of intersection, if any.

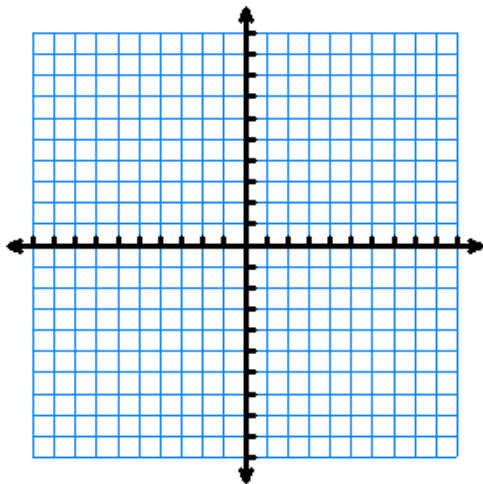
1.  $x^2 + y^2 = 5$   
 $y = -2x$



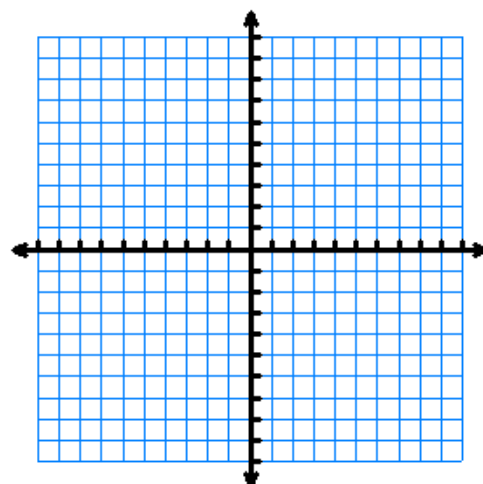
2.  $x^2 + y^2 = 49$   
 $y = x - 7$



3.  $(x-1)^2 + y^2 = 9$   
 $y = 3$



4.  $(x+3)^2 + (y-1)^2 = 1$   
 $x - 3y = 3$



Solve the system algebraically.

5.  $x^2 + y^2 = 18$   
 $x - y = 0$

6.  $x^2 + y^2 = 25$   
 $y = x + 1$

7.  $x^2 - 2x + y^2 - 2y = 2$   
 $x + y = 4$

8.  $x^2 + y^2 - 4x - 6y = -9$   
 $x + y = 1$

Answers: 1.  $(-1, 2), (1, -2)$  2.  $(7, 0), (0, -7)$  3.  $(1, 3)$  4. no solution  
5.  $(3, 3), (-3, -3)$  6.  $(-4, -3), (3, 4)$  7.  $(3, 1), (1, 3)$  8. no solution