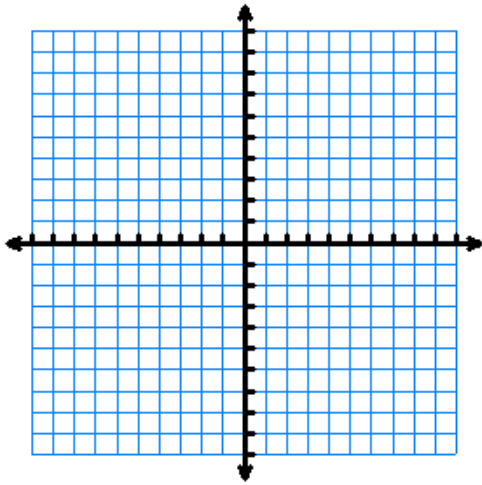


Systems of Conics WS 1
A Circle and A Line

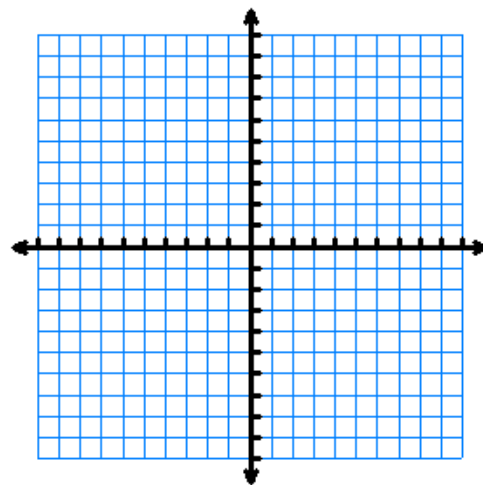
Name _____

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

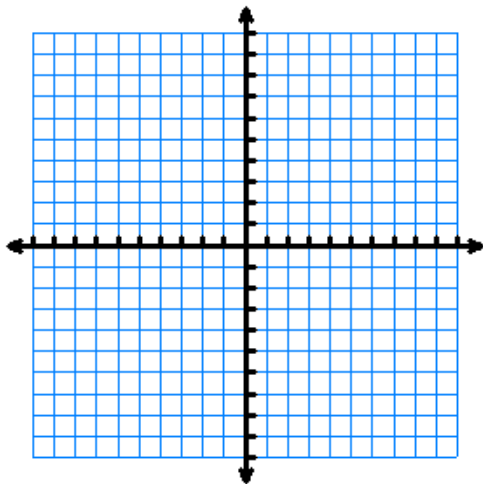
1. $x^2 + y^2 = 5$
 $y = -2x$



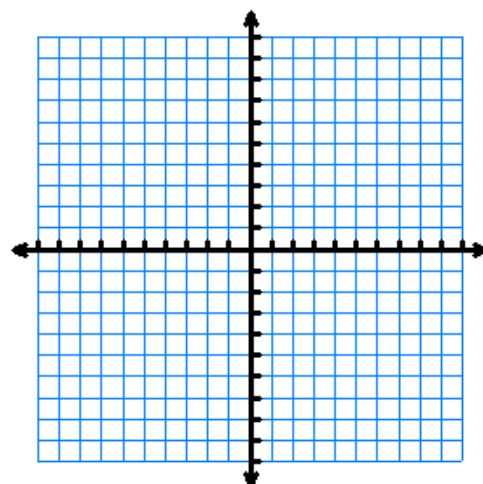
2. $x^2 + y^2 = 49$
 $y = x - 7$



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