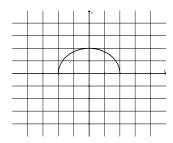
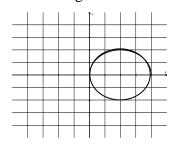
1. Write parametric equations and intervals for *t* for each of the following:

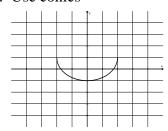
a. Use conics



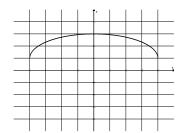
b. Use trig



c. Use conics



d. Use trig



2. Find the rectangular equation by eliminating the parameter.

a.
$$x_t = 3t - 3$$

b.
$$x_t = t + 1$$

c.
$$x_q = 2\cos q$$

$$y_t = 2t + 1$$

$$y_t = \frac{t}{t+1}$$

$$y_q = 3\sin q$$

$$x = -10 + 4t$$

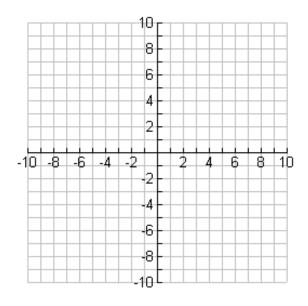
5) Graph the parametric equation

$$y = 9 - 2t$$

for the time interval $0 \le t \le 5$.

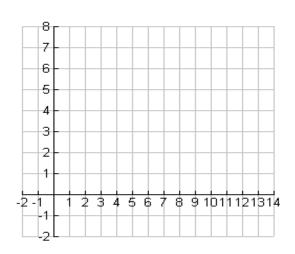
t	x =	y =

b) Eliminate the parameter and find the equation for the line.



- 6) Cole goes to a party and the path he walks through the party is modeled by the equation $\begin{cases} x=2+2t \\ y=1+t \end{cases}$. Lili is also at the party and her path of travel is modeled by the equation $\begin{cases} x=12-4t \\ y=3+t \end{cases}$. For the time interval $0 \le t \le 4$
 - a) Graph the path of each through the party.

t	$\mathbf{x} =$	y =	\mathbf{x} =	y=



- b) Do their lines of travel intersect?_____
- c) Do Cole and Lili run into each other? _____ If so,when?____