## Parametric Equations

To set up the calculator:

- 1. [MODE] change from <u>Func</u> to <u>Par</u>
- 2. Set window: Tmin=-5 Tmax=5 Tstep=.1 Xmin=-6 Xmax=6 Xscl=1 Ymin=-5 Ymax=5 Yscl=1
- 3. Inverse functions:

| a) graph | X1T=-3<br>Y1T=T                 | (Describe the relationship between x and y)  |
|----------|---------------------------------|--|
|          | X2T=T<br>Y2T=-3                 | (Describe the relationship between x and y)<br>(Describe the relationship between equations 1 and 2) |
| b) graph | X1T=2T+1<br>Y1T=T               | (Describe the relationship between x and y)  |
|          | X2T=T<br>Y2T=2T+1               | (Describe the relationship between x and y)<br>(Describe the relationship between equations 1 and 2) |
| c) graph | X1T=2T²+1<br>Y1T=T              | (Describe the relationship between x and y)  |
|          | X2T=T<br>Y2T=2T <sup>2</sup> +1 | (Describe the relationship between x and y)<br>(Describe the relationship between equations 1 and 2) |
| d) graph | X1T=2cosT<br>Y1T=2sinT          | (Describe the relationship between x and y)<br>(Be sure that the calculator is set in radians)       |
|          |                                 | (Describe the relationship between x and y)<br>(Describe the relationship between equations 1 and 2) |