Michael McNally<br>Mathematics Department Head<br>Lower Canada College<br>4090 Royal Ave. Montreal, Qc H4A-2M5

(514)-482-9797 ext. 253
mmcnally@lcc.ca
Building Curriculum Links Conference
Greenfield Park, Qc
June 26, 2001

## CONICS FOR THE TI-83 PLUS

The Conics app allows the user to graph Circles, Ellipses, Hyperbolas and Parabolas:
Key Features:

- Allows user to graph all four conic sections.
- Works in multiple graphing modes (Function, Polar and Parametric)
- Solves for common conic terms.

Available: Spring 2001
Price: Free
Note: This demonstration is with a preliminary version and changes are likely before the app is put on the market.

SETUP: Before running the app, you may wish to reset the calculator (to make sure your calculator behaves like this script). To get a round circle, set the graph window to reflect the proper aspect ratio (remember Friendly Windows). Setting Y at $2 / 3$ of X is desired. If you do not reset, set to radians in the MODE menu.


CIRCLE


Run the app. Choose CIRCLE and select \#1. Enter 3, -1 and 6 for H, K and R. Then press the GRAPH key.

Press the $Y=$ key to return to the circle menu, then ESC twice to get back to the main menu for the Conics app.

Within the application press the MODE key and select PAR. Press the ESC key and return to the main menu. Select \#2 ELLIPSE, then \#1.Enter 6, 3, 2 and -1 and GRAPH.




As above one can select POL from the MODE key. The parabola above was drawn by selecting \#2, $R=\frac{2 e p}{1+e \cos \vartheta}$ with $\mathrm{e}=1$ and $\mathrm{p}=2$ and GRAPH.

