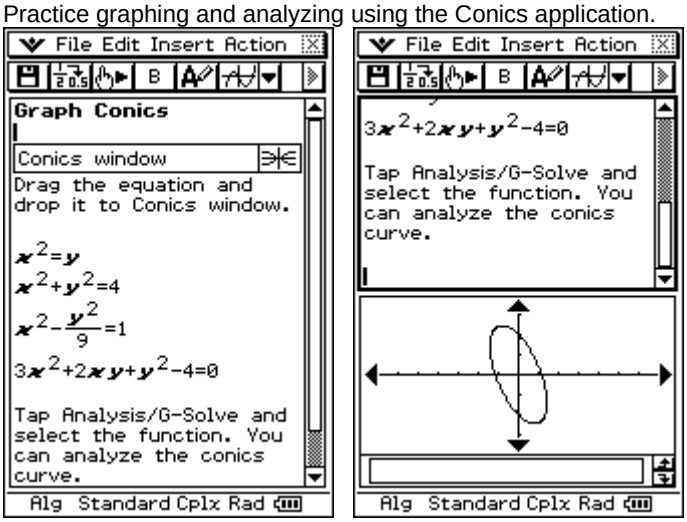
More Conics

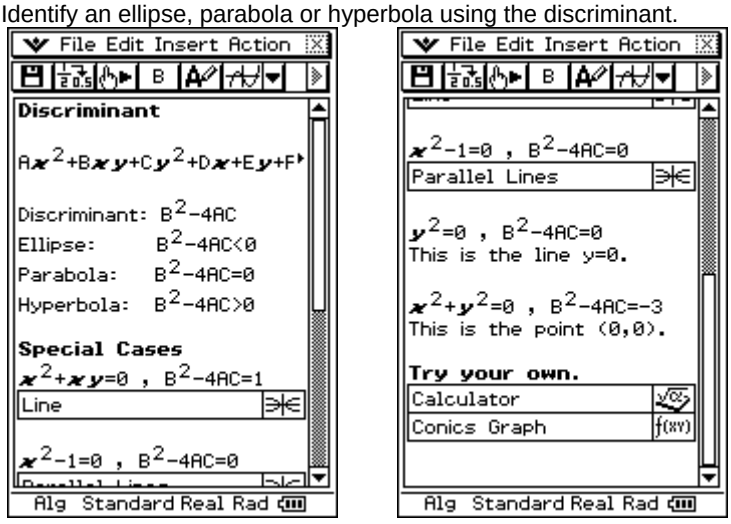
This week, we continue our exploration of conics using the ClassPad's Conics application. We will go from simple graphing to plotting each planet's orbit in our solar system. Learn how to move the conic equation you are graphing. Calculate the eccentricity of each equation.

This file includes eActivities on:
1_Graph conics – Practice graphing and analyzing using the Conics application.
2_Discriminant – Identify an ellipse, parabola or hyperbola using the discriminant.
3_Translation – Watch the ellipse shift around the graph. Easily, set your equation into Standard Form.
4_Conics-Parametric – Compare the graphs of conics equations in parametric form.
5_Rotation of Axes – Rotation of axes using a transformation matrix.
6_Rotation of Graph - Two examples on how to rotate the graph.
7_Eccentricity e – Do you know how to find the eccentricity of each conics equation?
8_Eccentricity Graph – Change the numbers and change the graph's position and shape.
9_Planetary Orbit - Graph the orbits of all our planets.

1_Graph conics
Practice graphing and analyzing using the Conics application.

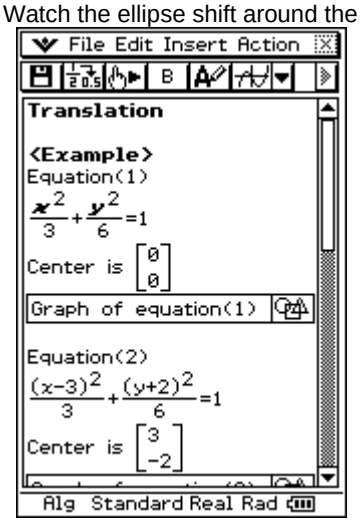


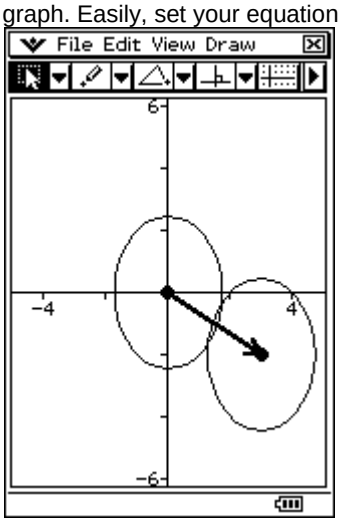
2_Discriminant
Identify an ellipse, parabola or hyperbola using the discriminant.

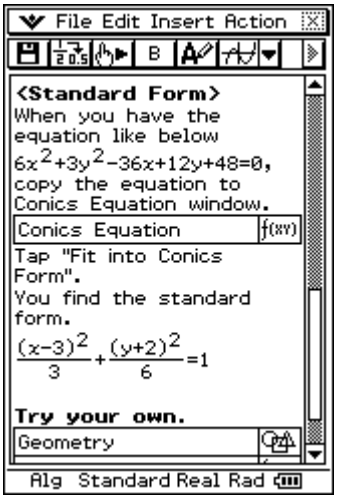


3_Translation

Watch the ellipse shift around the graph. Easily, set your equation into Standard Form.

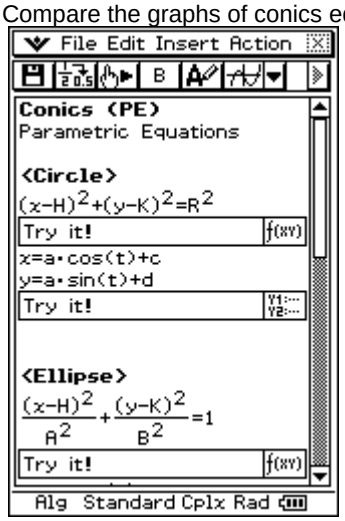


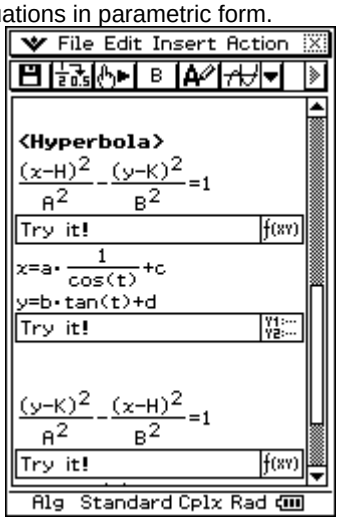




4_Conics-Parametric

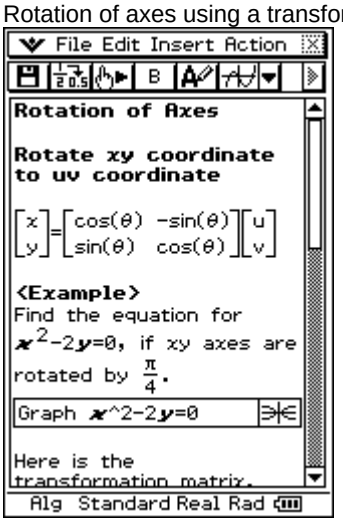
Compare the graphs of conics equations in parametric form.

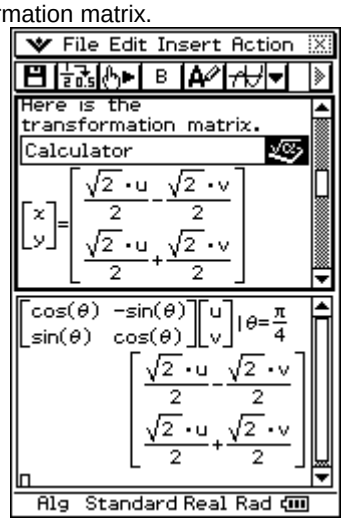




5_Rotation of Axes

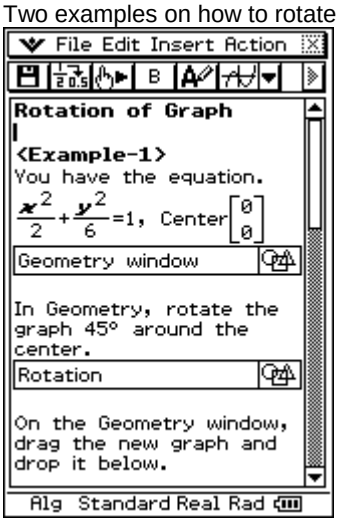
Rotation of axes using a transformation matrix.

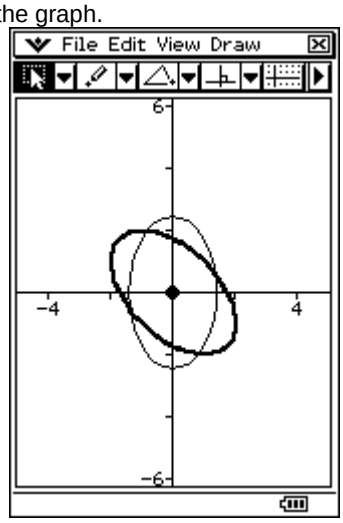




6_Rotation of Graph

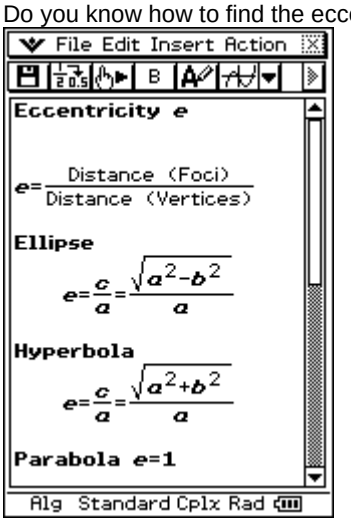
Two examples on how to rotate the graph.

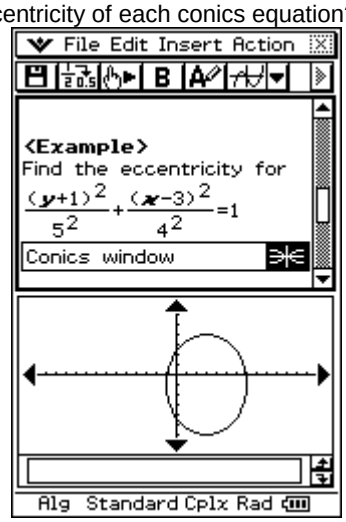




7_Eccentricity e

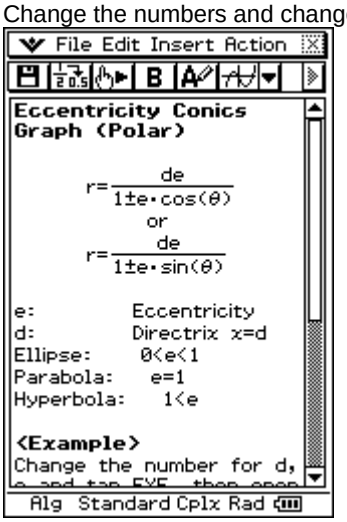
Do you know how to find the eccentricity of each conics equation?

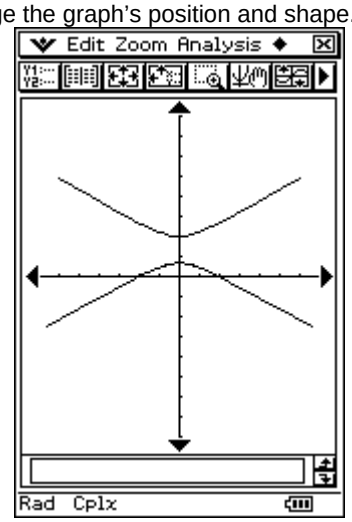




8_Eccentricity Graph

Change the numbers and change the graph's position and shape.





9_Planetary Orbit

Graph the orbits of all our planets.