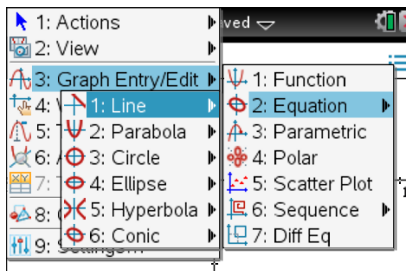


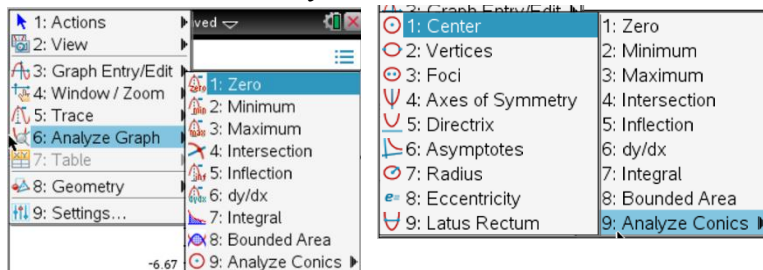
8.1, 8.2 & 8.3 Parabolas, Ellipses & Hyperbolas
Target 4A/4C/4E: Investigate the geometric properties of parabolas/ellipses/hyperbolas

Graphing Conic Sections on the TI-Nspire

Graph Conics



Analyze conics



Type of Conic	Equation	Key Features
	$(x - 1)^2 + (y + 3)^2 = 8$	Center: _____ Radius: _____
	$(y + 3)^2 = 8(x - 1)$	Vertex: _____ Focus: _____ Directrix: _____ Axis of Symmetry: _____ Focal Width (Latus Rectum): _____ Eccentricity: _____
	$\frac{(x + 2)^2}{25} + \frac{(y - 1)^2}{36} = 1$	Center: _____ Eccentricity: _____ Vertices: _____ Foci: _____ Axes of Symmetry: _____
	$\frac{y^2}{9} - \frac{x^2}{16} = 1$	Center: _____ Eccentricity: _____ Vertices: _____ Foci: _____ Axes of Symmetry: _____ Asymptotes: _____

Type of Conic	Equation	Key Features
	$\frac{x^2}{9} + \frac{y^2}{16} = 1$	
	$\frac{(x - 1)^2}{25} - \frac{(y - 4)^2}{36} = 1$	
	$(x - 2)^2 = 6(y - 1)$	
	$\frac{(x + 2)^2}{36} + \frac{(y - 1)^2}{25} = 1$	

More Practice

Conics on the TI-Nspire

<https://www.youtube.com/watch?v=4z63CeoJD1Q>

Homework Assignment

p.579 #39,43,45; p.591 #17,19,20; p.600 #17,21,22