

Precalculus

Conics

The list below contains the specific *learning targets* for the unit on conics. Before the unit test, you should be able to place a check next to each statement as being true.

- I can identify the four basic conics given their equations.
- I can sketch the graph of an ellipse, a circle, a hyperbola, or a parabola given its equation.
- I can analyze the graph an ellipse, including its center, vertices, foci, and axes.
- I can analyze the graph a hyperbola, including its center, vertices, foci, and asymptotes.
- I can analyze the graph a parabola, including its vertex, focus, and directrix.

Textbook Assignments

The exercises below are from *Precalculus: A Graphing Approach* by Hungerford, Jovell, and Mayberry. These specific problems are the bare minimum that should be completed after each lesson, but you are encouraged to attempt more if needed.

- 11.1 The Ellipse **pg 698: 1-11 (odd), 13-16 (all)**
- 11.2 The Hyperbola **pg 707: 1-11 (odd), 13-18 (all)**
- 11.3 The Parabola **pg 714: 1, 3, 5, 7-18**
- 11.4 Translations of Conics **pg 726: 1, 3, 7, 11, 23, 29, 31**

Assignments are subject to change in class.