# Unit Reflection: Conic Sections

| Learning Target | Success Criteria (What you need to know) | How well do you know this? (**YOU**) | Are you sure? (**US**) |
|---|---|---|---|
| CS1:Midpoint and Distance | ✓ Recognize the shapes derived from slicing a cone<br>✓ Given two points, find the midpoint between them<br>✓ Given two points, find the distance between them | | |
| CS2: Parabolas | ✓ Understand that a parabola is the set of points equidistant from a given point and line<br>✓ Identify the focus, directrix, vertex, latus rectum, and axis of symmetry of a parabola | | |
| CS3: More Parabolas | ✓ Be able to identify the equations of a parabola<br>✓ Know how the numbers in a parabola equation can be used to find the vertex and orientation of the parabola<br>✓ Identify the vertex and orientation of a parabola given its equation<br>✓ Use the numbers in a parabola equation and formulas to find other quantities | | |
| CS4: Circles | ✓ Understand that a circle is the set of points equidistant from a given point<br>✓ Identify the center and the radius of a circle given its equation<br>✓ Use given information to find the equation of a circle | | |
| CS5: Ellipses | ✓ Understand that an ellipse is the set of points whose distances to two given points have a constant sum<br>✓ Identify the center, the length of the semi-major axis and the length of the semi-minor axis of an ellipse given its equation<br>✓ Use the numbers in an ellipse equation and formulas to find other quantities<br>✓ Use given information to find the equation of an ellipse | | |

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| CS6: Hyperbolas | ✓ Understand that an ellipse is the set of points whose distances to two given points have a constant difference | ☺ 😐 ☹ | ☺ 😐 ☹ |
| | ✓ Identify the center, the length of the semi-transverse axis and the length of the semi-conjugate axis of a hyperbola | ☺ 😐 ☹ | ☺ 😐 ☹ |
| | ✓ Use the numbers in an hyperbola equation and formulas to find other quantities | ☺ 😐 ☹ | ☺ 😐 ☹ |
| | ✓ Use given information to find the equation of a hyperbola | ☺ 😐 ☹ | ☺ 😐 ☹ |
| CS7: Identifying Conic Sections and Graphing | ✓ Determine the type of conic section from an equation in expanded form | ☺ 😐 ☹ | ☺ 😐 ☹ |
| | ✓ Be able to graph a parabola given an equation in vertex form | ☺ 😐 ☹ | ☺ 😐 ☹ |
| | ✓ Be able to graph a circle given an equation in standard form | ☺ 😐 ☹ | ☺ 😐 ☹ |
| | ✓ Be able to graph an ellipse given an equation in standard form | ☺ 😐 ☹ | ☺ 😐 ☹ |
| | ✓ Be able to graph a hyperbola given an equation in standard form | ☺ 😐 ☹ | ☺ 😐 ☹ |
| CS8: Completing the Square | ✓ Use the method of completing the square to write the equation of a conic section in standard form | ☺ 😐 ☹ | ☺ 😐 ☹ |

Reflections:

Goals for NEXT TIME: