

NAME: _____

1. Explain how the points on a parabola are related to one another.
2. Write the equation of a parabola that opens up and has its vertex at the origin. Give the focus of the parabola.
3. Describe how the center of an ellipse, the foci, vertices, and co-vertices are related.

Answers may vary. Sample: The points on a parabola are all points that are the same distance from the focus and the directrix.

Answers may vary. Sample: $y = \frac{1}{32}x^2$; focus is (0, 8)

Answers may vary. Sample: The center of an ellipse is the midpoint of the foci and the midpoint of the vertices. The foci and the vertices are all on the major axis. The center is also the midpoint of the co-vertices on the minor axis.
