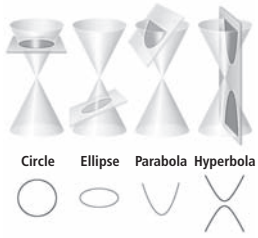
Chapter 10 (p. 722, 10-1)

conic section

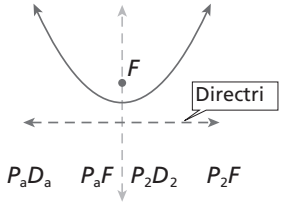
conic section: A plane figure formed by the intersection of a double right cone and a plane. Examples include circles, ellipses, hyperbolas, and parabolas.



Chapter 10 (p. 751, 10-5)

directrix

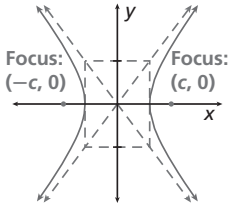
directrix: A fixed line used to define a *parabola.* Every point on the parabola is equidistant from the directrix and a fixed point called the *focus*.



Chapter 10 (p. 744, 10-4)

focus (pl. foci) of a hyperbola

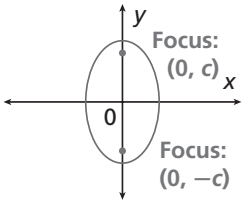
focus (pl. foci) of a hyperbola: One of two fixed points F_1 and F_2 that are used to define a hyperbola. For every point P on the hyperbola, $PF_1 - PF_2$ is constant.



Chapter 10 (p. 744, 10-4)

focus (pl. foci) of an ellipse

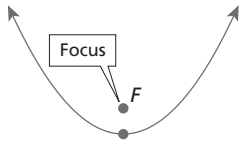
focus (pl. foci) of an ellipse: One of two fixed points F_1 and F_2 that are used to define an ellipse. For every point P on the ellipse, $PF_1 + PF_2$ is constant.



Chapter 10 (p. 751, 10-5)

focus (pl. foci) of a parabola

focus (pl. foci) of a parabola: A fixed point *F* used with a *directrix* to define a *parabola*.



Chapter 10 (p. 768, 10-7)

nonlinear system of equations

nonlinear system of equations: A system in which at least one of the equations is not linear.

$$\begin{cases} y = 2x^2 \\ y = -3x^2 + 5 \end{cases}$$

Chapter 10 (p. 731, 10-2)

tangent line

tangent line: A line that is in the same plane as a circle and intersects the circle at exactly one point.