

FIGURE 1. A node with equation  $y^2 = x^3 + x$ . The file for this image is `Node.pdf`.

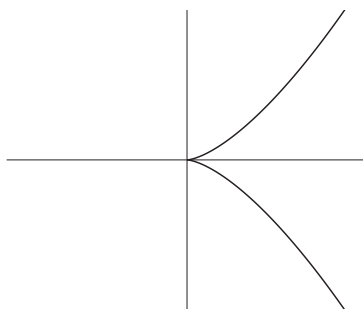


FIGURE 2. A cusp with equation  $y^2 = x^3$ . The file for this image is `Cusp.pdf`.

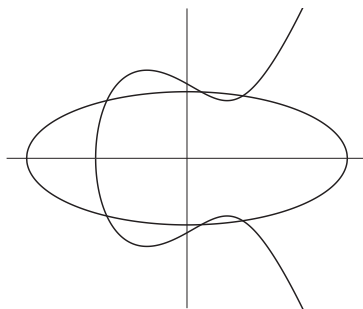


FIGURE 3. An ellipse intersecting a curve in 6 points. The ellipse has equation  $x^2 + 4y^2 = 16$  and the curve has equation  $y^2 = x^3 - 3x + 5$ . The file for this image is `Intersecting.pdf`.

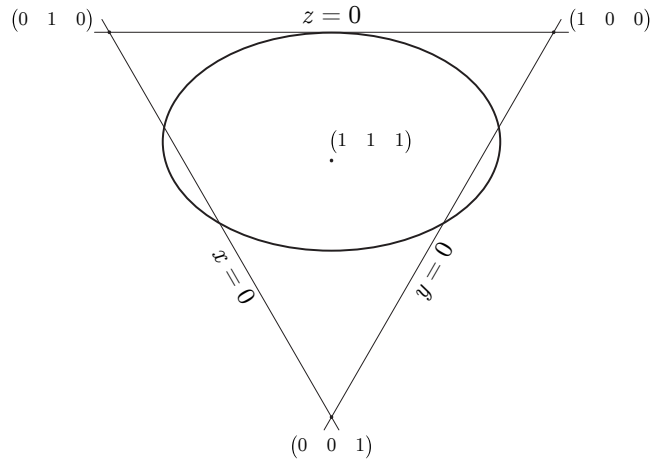


FIGURE 4. An ellipse with projective coordinate equation  $(x - y)^2 + z(3z - 4x - 4y) = 0$ . The file for this image is **Plane.pdf**.

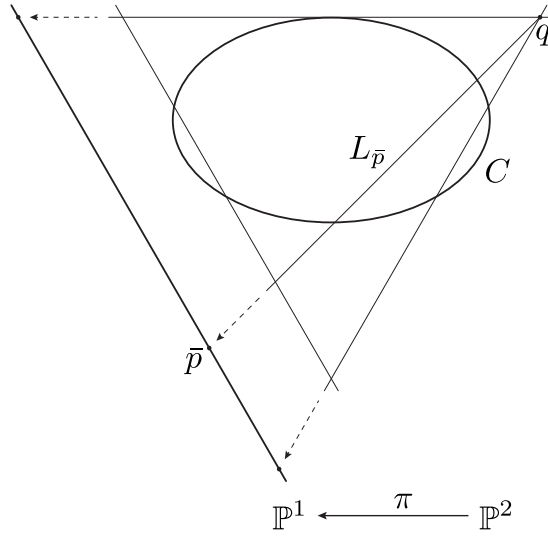


FIGURE 5. Projecting from  $\mathbb{P}^2$  to  $\mathbb{P}^1$ . The ellipse in is picture is the same as the one in the previous picture. The file for this image is **Projecting.pdf**.