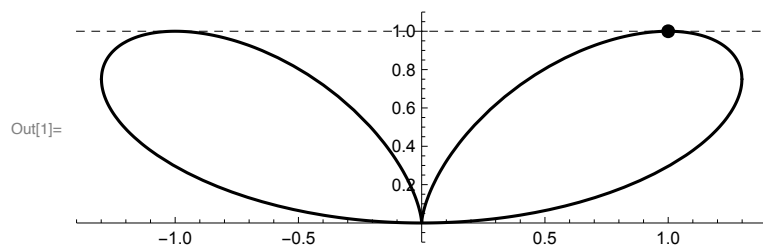


```

In[1]:= Plot[
  Flatten@Values @ Solve[(x^2 + y^2)^2 == 4 x^2 y, y],
  {x, -1.5, 1.5},
  PlotStyle -> Black,
  PlotRange -> {{-1.4, 1.4}, {- .1, 1.1}},
  AspectRatio -> 1/3,
  Epilog -> {
    PointSize@0.02, Point[{1, 1}],
    Dashed, InfiniteLine[{1, 1}, {1, 0}]
  }
]

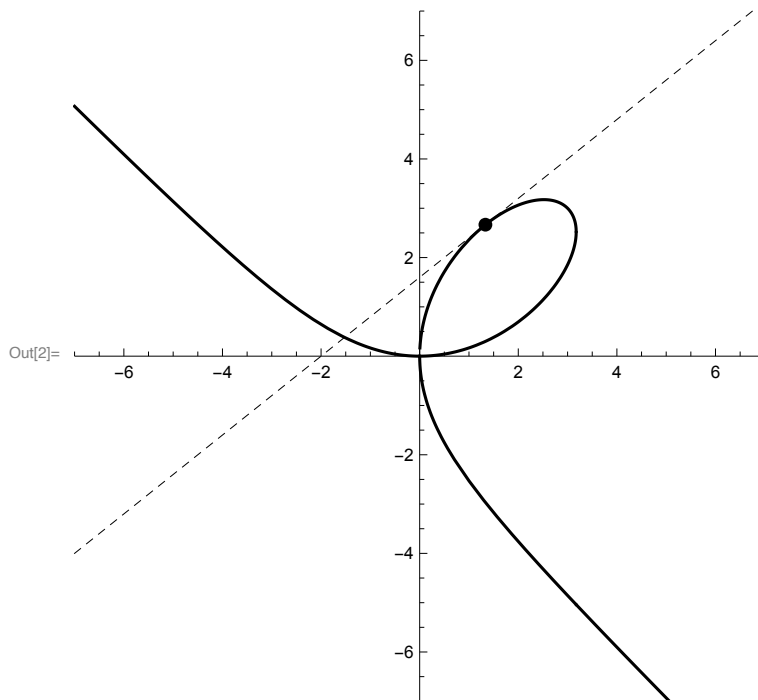
```



```

In[2]:= Plot[
  Flatten@Values @ Solve[x^3 + y^3 - 6 x y == 0, y],
  {x, -7, 7},
  PlotStyle -> Black,
  PlotRange -> {{-7, 7}, {-7, 7}},
  AspectRatio -> 1,
  Epilog -> {
    PointSize@0.02, Point[{4/3, 8/3}],
    Dashed, InfiniteLine[{4/3, 8/3}, {5, 4}]
  }
]

```



```

In[4]:= Manipulate[
  ParametricPlot[
    {a Cos[t], b Sin[t]},
    {t, -10, 10},
    PlotRange → {{-10, 10}, {-10, 10}},
    PlotStyle → Black,
    Epilog → {
      PointSize@0.02, Blue, Point[
        Flatten@{Flatten@Values@Solve[x^2/a^2 + (-b^2 x/a^2)^2/b^2 == 1, x][[1]],
          -b^2 (Flatten@Values@Solve[x^2/a^2 + (-b^2 x/a^2)^2/b^2 == 1, x][[1]]) /
            a^2}],
      Point[Flatten@{Flatten@Values@Solve[x^2/a^2 + (-b^2 x/a^2)^2/b^2 == 1, x][[
        2]], -b^2 (Flatten@
          Values@Solve[x^2/a^2 + (-b^2 x/a^2)^2/b^2 == 1, x][[2]]) / a^2}],
      Dashed, InfiniteLine[Flatten@{Flatten@Values@
        Solve[x^2/a^2 + (-b^2 x/a^2)^2/b^2 == 1, x][[1]],
          -b^2 (Flatten@Values@Solve[x^2/a^2 + (-b^2 x/a^2)^2/b^2 == 1, x][[1]]) /
            a^2}, {1, 1}],
      InfiniteLine[Flatten@{Flatten@Values@
        Solve[x^2/a^2 + (-b^2 x/a^2)^2/b^2 == 1, x][[2]],
          -b^2 (Flatten@Values@Solve[x^2/a^2 + (-b^2 x/a^2)^2/b^2 == 1, x][[2]]) /
            a^2}, {1, 1}],
      Red, Dashing[None], Point[{a Cos[t], b Sin[t]}],
      InfiniteLine[{a Cos[t], b Sin[t]}, {a^2 (b Sin[t]), -b^2 a Cos[t]}]
    }
  ],
  {{a, 8}, 1, 8, Appearance → Labeled},
  {{b, 5}, 1, 8, Appearance → Labeled},
  {{t, Pi/4}, 0, 2 Pi, Appearance → Labeled}
]

```

Out[4]=

