

1. Find a Cartesian equation of the parametric curve $(e^t - 1, e^{2t})$
2. Give a parametric equation of the curve $x^3 = y^2$.
3. Find the area enclosed by the curve $(t^2 - 2t, \sqrt{t})$ and the y -axis.
4. Find the length of the loop of the curve $(3t - t^3, 3t^2)$.
5. Find the points of intersection of the two parametric curves $(2t, 1 - 4t)$ and $(1 - t, 1 + t^2)$.