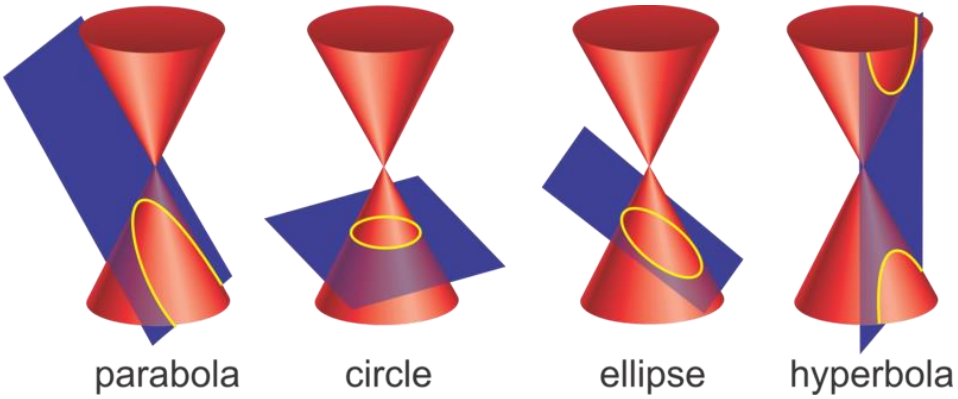
2A Parametrics Revisited



1. A curve has parametic equations

$$x = at^2, \qquad y = 2at, \qquad t \in \mathbb{R},$$

where a is a positive constant. Find the Cartesian equation of the curve

2.

A curve has parametric equations

$$x = ct, y = \frac{c}{t}, t \neq 0,$$

where c is a positive constant.

a) Find the Cartesian equation of the curve.

b) Hence sketch the curve

Note: Alternative approach (multiplying to cancel t)