Recall:

- Parametric equations for a surface (as opposed to a a curve) are of the form

$$x = f(u, v) \qquad y = g(u, v) \qquad z = h(u, v).$$

Recall:

- Parametric equations for a surface (as opposed to a a curve) are of the form

$$x = f(u, v) \qquad y = g(u, v) \qquad z = h(u, v).$$

- When we have $y = f(x)$, we parametrize that by $x = t, y = f(t)$.

For each equation,

(a) Find a parametric representation of the surface.

(b) Graph the surface on Maple in two ways:

  (i) Enter the original equation, and use the interactive menu to plot it implicitly.

  (ii) Enter your parametric equations (as a list within square brackets) and use the interactive menu to plot those.

(c) Identify the surface.

1. $y = 3x^2 + 2z^2$
2. $z^2 = 4x^2 + 9y^2$