

Math 2315 - Calculus 2

Quiz #9 - 2017.02.09

Solutions

Consider the following parametric equations:

$$\begin{cases} x(t) = t^2 - 1 \\ y(t) = t^4 + t^2 \end{cases}$$

Find an $x - y$ equation for the given curves.

Setting $t^2 = x + 1$ in the first equation, and substituting it into the second gives

$$y = (x + 1)^2 + (x + 1) = (x + 1)(x + 2)$$