Practice worksheet | Vector calculus

Parametric descriptions of curves

Name: _____ Date: _____

6 questions | 12 marks

1. Find the point at $t = 2$ for $x = t - 1$, $y = t^2 + 1$. [2 marks]

2. Eliminate t from $x = 3t + 1$, $y = 2t - 4$. [2 marks]

3. For $x = t^2$, $y = t$, $t \geq 0$, give the Cartesian equation and restriction. [2 marks]

4. Parameterise the segment from $(0, 4)$ to $(6, 1)$. [2 marks]

5. For $x = 4 - t$, $y = t^2$, $0 \leq t \leq 2$, find the start and end points. [2 marks]

6. Explain the repeated trace for $x = t^2$, $y = t^2$, $-1 \leq t \leq 1$. [2 marks]