

Quiz 8

Name: _____

1. Explain why the parametric curve $x = t^2$, $y = t^3 - 2t$ passes through the point $(1, -1)$. Then find the equation of the tangent line to the curve at $(1, -1)$.

2. Consider a point with Cartesian coordinates $(x, y) = (1, -1)$. Find a pair of polar coordinates (r, θ) such that:

(a) $r > 0$ and $\theta \in [0, 2\pi]$

(b) $r < 0$ and $\theta \in [0, 2\pi]$