

ID: _____ Sec. _____ Qz 2 MATH 101-T141

Serial: _____

1. Find a point (a,b) where normal line to the curve $y = \sqrt{x+1}$ is parallel to the line $2y + x = 0$.

2. Find slope of the curve $y = \cot x e^{\cos x}$ at $x = \pi/2$.

3. The position function of a particle moving along a line is $s(t) = (t^3 / 3) - 3(t^2 / 2) + 2t$, $0 \leq t \leq 4$,

Find the time interval(s) where the particle is moving backward. (*Use other side*)

ID: _____ Sec. _____.

Qz 3

Serial: _____

1. Find a point (a, b) with $a > 0$ where tangent line to the curve $y = x / (x - 1)$ is parallel to the line $9y = x + 3$.

2. Find slope of the curve $y = e^{\cos \pi x + \sin \pi x}$ at $x = 1$.

3. The position function of a particle moving along a line is $s(t) = (t^3 / 3) - (t^2 / 2)$, $0 \leq t \leq 3$.

Find the total distance the particle travelled in this time interval. (*Use other side*)