King Fahd University of Petroleum and Minerals Department of Math & Stat Math 201 Section # 22 (111) Quiz 1 (a)

Time: 20 minutes	Marks:/9	
Name: ID #:		
1. For the neground twice exercise $4^2 + 4^3 = 4^3$	d^2y Where is this sum of some	

1. For the parametric curve $x = t^2$, $y = t^3 - 3t$, find $\frac{dy}{dx^2}$. Where is this curve concave upward?

2. Find length of the curve $r = 2 - 2\cos c$.

3. Set up integral (do not evaluate it) to find area of the surface generated by revolving $x = r \cos t$, $y = r \sin t (0 \le t \le \pi)$ about the x - axis.

King Fahd University of Petroleum and Minerals Department of Math & Stat Math 201 Section # 22 (111) Quiz 1 (b)

Ti	me: 20 minutes	Marks:	/9
Name: ID #:			
1.	Describe the motion of the particle with $y = 3 + \sin t$ and $0 \le t \le 2\pi$.	position (x, y) where $x = 2 + \cos \theta$	st,
2.	Test the curve $r = 2\cos 2\theta$ for symmetr	ry about $x - axis$, $y - axis$ and the	origin.

3. Calculate length of the curve: $x = e^t \sin t$, $y = e^t \cos t$ $(0 \le t \le \pi)$