KFUPM **QUIZ (2a)** **MATH 201-181**

Name:_____S.ID:_____Sec.( ) Ser.# ( )

Q1) Sketch the curve with $r = \sin\frac{\theta}{2}$, $0 \le \theta \le \pi$ by first sketching the graph of r as a function of θ in Cartesian coordinates.

Q2) Find the exact length of the polar curve: $r = 5^{\theta}$, $0 \le \theta \le 2\pi$.