KFUPM	Term 122		Date: 24/2/2013	
Mathematics & Statistics	MATH 102	Dura	Duration: 25 minutes	
	Quiz# 2			
Name:	ID #:	Section 28	Serial #:	
Q1. Find the volume of the	solid generated by	revolving the region	bounded by the	
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curves  $f(x) = \frac{1}{x^2+1}$ , y = 0, x = 0, x = 3 about the y-axis.

**Q2.** Find the length of the curve  $y = \frac{1}{2}x^2 - \frac{1}{4}\ln x$  from x = 2 to x = 4.

*Q3.* Find the volume of a solid such that the base of the solid is the region bounded by the curves  $y = \sqrt{x}$ , y = 0, x = 2, and x = 3. The cross sections of the solid perpendicular to the *y* – axis are squares with one side lying along the base.

With My Best Wishes