KFUPM | Term 171 | Date:31/10/2017

Mathematics & Statistics | MATH 102 | Duration: 35 minutes

Quiz# 3

Name: ID #: Section:

Q1: Express as an integral, the volume of the solid generated by rotating the region bounded by the curves $x = y^2$, $x = 6y - 2y^2$ about x-axis:

Q2: The volume of the solid generated by rotating the region bounded by the curves $y=x^4$, $y=0$, $x=1$ about the x axis is:

Q3. Find $\int \frac{\sqrt{x^2-1}}{x} dx$

Q4. The average value of $f(y) = \frac{\ln y}{\sqrt{y}}$ on the interval $[1, e^2]$

Q5. $\int \frac{\cos^5\sqrt{x}}{\sqrt{x}} dx =$

Q6. $\int x\ sex(x) \tan(x)\ dx$