King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
Math 102 (07), Quiz # 4 (sections 6.3, 7.2, 7.3), Semester 182

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Name: Student ID#: SR#

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Q1) Set up an integral, but do not evaluate, that represents the volume of the solid generated by revolving the region bounded by the curves $x = 1 + y^2$, $y = x - 3$ about $y = 3$. (Use the cylindrical shells method).

Q2) Evaluate the integral

$$\int \frac{dx}{x^2(x^2-4)^{\frac{3}{2}}}$$