

King Fahd University of Petroleum & Minerals

Department of Mathematics and Statistics

Math 102, Quiz # 2, Semester 191

Name:

serial #

Student ID#:

- Q. 1** Using the method of cylindrical shells, the volume of the solid obtained by rotating the region bounded by the curves. $x = 2y^2$, $x = y^2 + 1$; about $y = -2$ is equal to (Write the integration only)

King Fahd University of Petroleum & Minerals

Department of Mathematics and Statistics

Math 102, Quiz # 2, Semester 191

Name:

serial #

Student ID#:

Q. 2 If average value of $f(t) = 3t^2 - 6t$ from $t = 0$ to $t = b$ is 4 . Then what is b ?

King Fahd University of Petroleum & Minerals

Department of Mathematics and Statistics

Math 102, Quiz # 2, Semester 191

Name:

Serial #

Student ID#:

Q 3. Solve $\int x \tan^2 x \, dx$