KFUPM – Department of Mathematics and Statistics – Term 151

MATH 102

QUIZ # 2 Code 1 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points)

Find the volume of the solid obtained by rotating the region enclosed by the curves $y = \sqrt{x+1}$, $y = x$, $x = 0$ and $x = 1$ about the $x-axis$.

Exercise 2 (5 points)

Find the area of the surface of the solid obtained by rotating the curves $y = \frac{1}{2}x^2 - 4, 0 \le x \le 1$ about the $y-axis$

KFUPM – Department of Mathematics and Statistics – Term 151

MATH 102

QUIZ # 2 Code 2 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points)

Find the volume of the solid obtained by rotating the region enclosed by the curves $y = \sqrt{x+1}$, $y = x$, $x = 0$ and $x = 1$ about the $y-axis$.

Exercise 2 (5 points)

Find the area of the surface of the solid obtained by rotating the curves $y = \frac{1}{2}x^2 + 4, 0 \le x \le 1$ about the $y-axis$.