KFUPM – Department of Mathematics and Statistics – Term 142

MATH 102

QUIZ # 5 Code 1 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points)

Determine whether the improper integral $\int_1^{\infty} \frac{dx}{x^3 + x}$ is convergent or divergent.

Exercise 2 (5 points)

Evaluate $\int \frac{x^2 dx}{\sqrt{9 - x^2}}$.

KFUPM – Department of Mathematics and Statistics – Term 142

MATH 102

QUIZ # 5 Code 2 (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points)

Evaluate $\int \frac{x^2 dx}{\sqrt{4-x^2}}$.

Exercise 2 (5points)

Determine whether the improper integral $\int_2^{\infty} \frac{dx}{x^3 - x}$ is convergent or divergent