KFUPM - Department of Mathematics and Statistics - Term 141 **MATH 102 QUIZ # 4 Code 1** (Duration = 20 minutes)

NAME:______ ID:_____ Section: _____

Exercise 1 (5 points)

Write $\frac{2}{x^3 - x^2 + x - 1}$ in partial fractions.

Exercise 2 (5 points)

Determine whether the improper integral $\int_{2}^{\infty} \frac{2}{x^{3} - x^{2} + x - 1} dx$ is convergent or divergent.

KFUPM - Department of Mathematics and Statistics - Term 141 **MATH 102 QUIZ # 4 Code 2** (Duration = 20 minutes)

NAME:______ID:_____Section: _____

Exercise 1 (5 points) Write $\frac{2x^2 + 2x + 2}{x^3 + x^2 + x + 1}$ in partial fractions.

Exercise 2 (5points)

Determine whether the improper integral $\int_0^\infty \frac{2x^2 + 2x + 2}{x^3 + x^2 + x + 1} dx$ is convergent or divergent