

July 30,2011

Quiz#3 Math102, sec 6

Time Allowed: 30 minutes

Name:

ID # :

serial:

Exercise1:

- i)- Determine whether the integral $I = \int_0^3 \frac{dx}{x\sqrt{x}}$ is improper or not.
ii)-Show whether the integral I is convergent or divergent.

Exercise2:

Write out the form of the partial fraction decomposition of $\frac{x^4+3x^3+2x^2+1}{(x+2)(x^2+x)}$.
Do not determine the numerical values of the coefficients.

Exercise3:

Evaluate the following integrals:

1. $\int e^{-x} \cos(2x) dx.$
2. $\int \frac{dx}{7 + 5 \cos x}$