## Math102 Term172 Sec 31 Quiz 2

Q1)(5points) A particle moves along a line so that its velocity at time t is  $v(t) = t^2 - t - 2$  .(measured in meters per seconds).

Find the **distance** of the particle during the time period  $1 \le t \le 3$ 

Q2)(5points) Evaluate the following integral 
$$I = \int_{-1}^{0} (x+2)(x+1)^{19} dx$$

Q3) (5points) Find the integral

$$I = \int \frac{\sin(2x)}{1 + \sin^2 x} \ln(1 + \sin^2 x) \, dx$$