## Homework 2

Use the Riemann sum command to demonstrate the Fundamental Theorem of Calculus for the following integrands. In each case vary the METHOD OPTION and for the PARTITION OPTION use both equally space intervals and random. You should take derivatives at various points.

1. 1/x #be careful where you take intervals

2. sin(x)

3.  $sqrt(1-x^2)$  #be careful where you take your intervals.

4. exp(x)

 $5. x/(x^2+1)$