Math102
Chapter 5
Sec#5.2

Riemann Sum

```
Warning, the name changecoords has been redefined
```

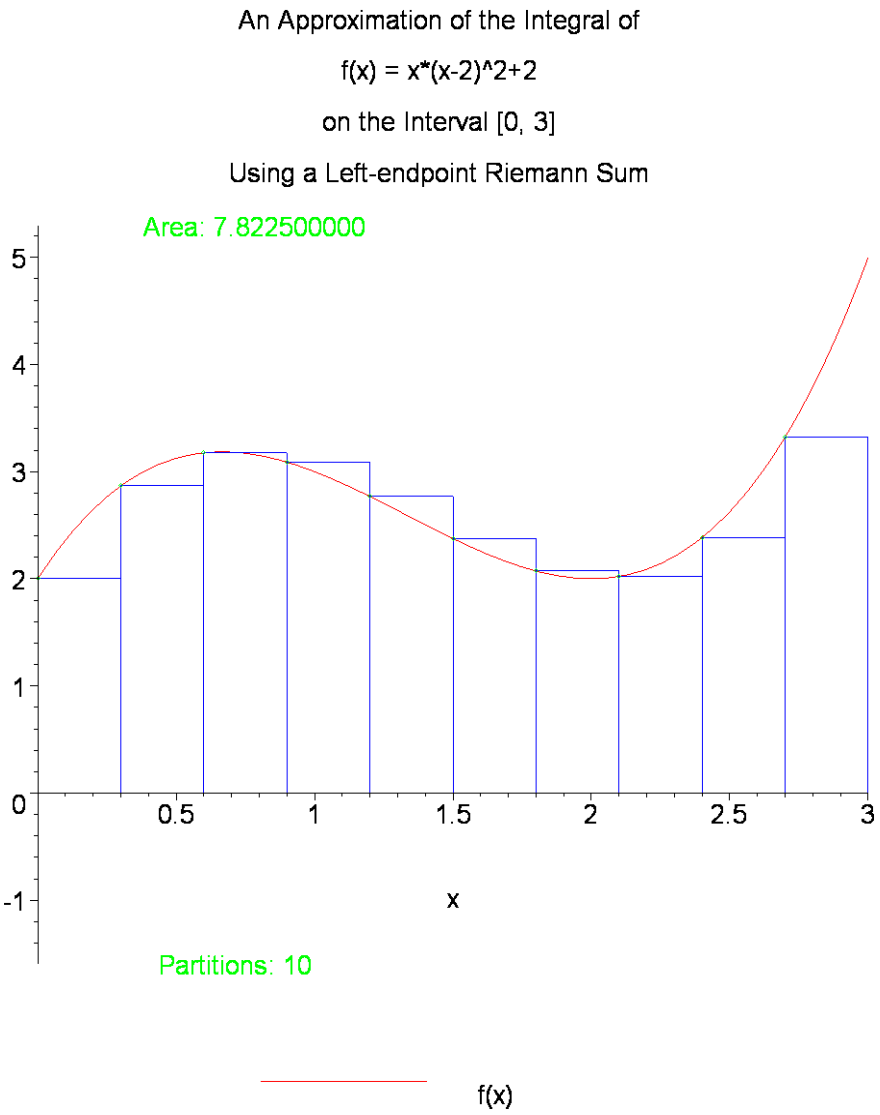
```
> restart: with(plots):with(Student[Calculus1]):
```

```
Warning, the name changecoords has been redefined
```

```
> f(x):=x*(x-2)^2+2;
```

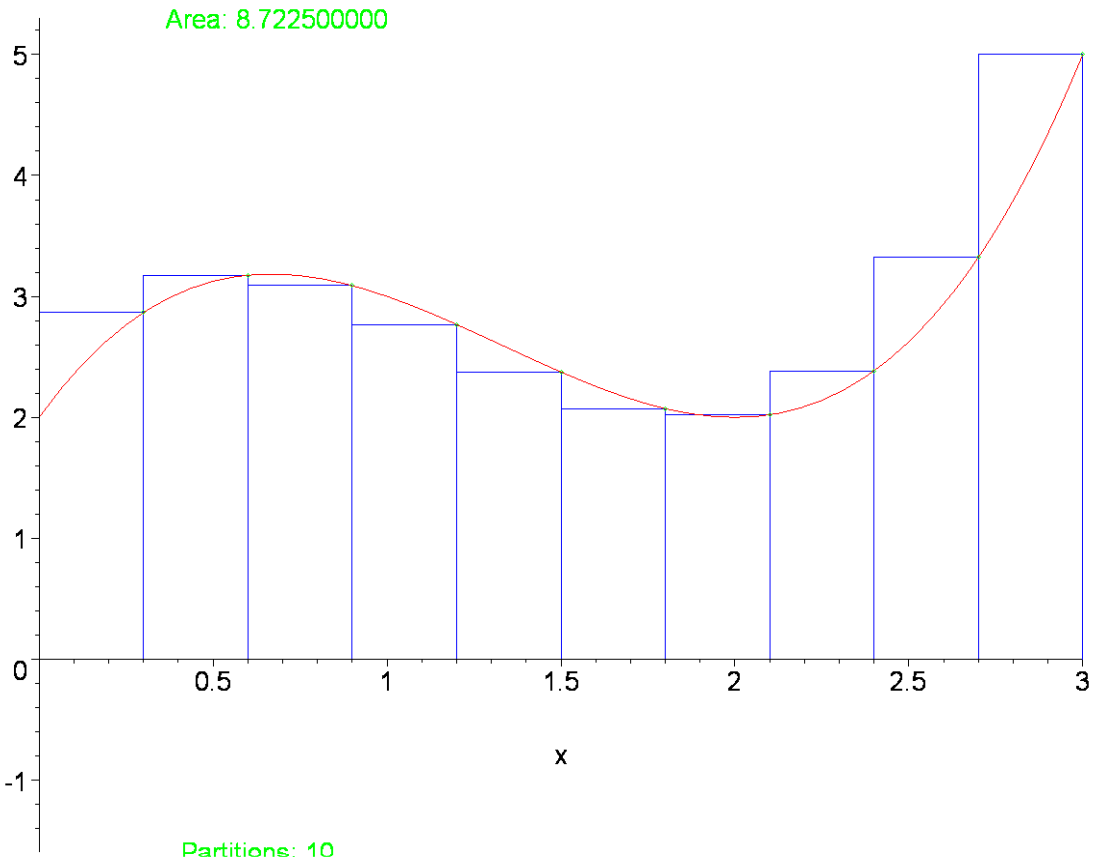
$$f(x) := x\,(x-2)^2+2$$

```
> RiemannSum(f(x), x=0..3, method = left, output =
  plot,partition=10);
```




```
> RiemannSum(f(x), x=0..3, method = right, output = animation);
```

>


An Approximation of the Integral of
f(x) = x*(x-2)^2+2
on the Interval [0, 3]
Using a Right-endpoint Riemann Sum
Area: 8.722500000
5
4
3
2
1
0
-1
0.5
1
1.5
2
2.5
3
x
Partitions: 10