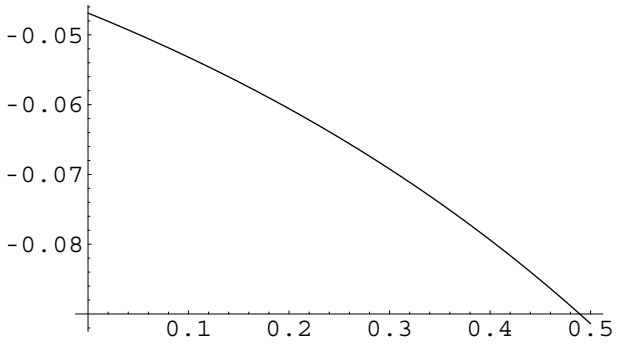
```
In[1]:= S[y0_, y1_, y2_, h_] := (h / 3) (y0 + 4 y1 + y2)

In[2]:= f[x_] := 2 / (x - 4)

In[3]:= N[S[f[0], f[0.25], f[0.5], 0.25], 10]

Out[3]= -0.2670634921

In[4]:= N[Integrate[f[x], {x, 0, 0.5}], 10]

Out[4]= -0.2670627852 + 0. I

In[5]:= Errorex = Abs[-0.2670634921 - (-0.2670627852)]

Out[5]= 7.069 × 10^-7

In[6]:= g[x_] = D[f[x], {x, 4}]
```

Out[6]= $\frac{48}{(-4+x)^5}$

```
In[7]:= Plot[g[x], {x, 0, 0.5}]
```




```
Out[7]= - Graphics -

In[8]:= Cotaerror = Abs[((0.25^5) / 90) g[0.5]]

Out[8]= 9.9165 × 10^-7
```