```
(%i1) g(x) := 6*x + 2*(cos(x))^2 - 4*x^2*sin(x) - (5/x^2);
```

$$(\%o1)\quad g(x) := 6\,x + 2\,\cos(x)^2 + (-4)\,x^2\,\sin(x) - \frac{5}{x^2}$$

```
(%i2) n : 2;
(%o2) 2
```

```
(%i3) h : 0.5;
(%o3) 0.5
```

```
(%i5) delta_g(x) := abs( diff(g(x), x, 3) * ( h^(n+1) / ( 4 * (n+1) ) ) );
```

$$(\%o5)\quad \mathrm{delta\_g}(x) := \left|\mathrm{diff}\left(g(x), x, 3\right)\frac{h^{n+1}}{4\,(n+1)}\right|$$

```
(%i8) delta_g(x);
(%o8) 0.010416666666667
```

$$\left|16\,\cos(x)\,\sin(x) + 24\,x\,\sin(x) + 4\,x^2\,\cos(x) - 24\,\cos(x) + \frac{120}{x^5}\right|$$

```
(%i9) wxplot2d([%], [x,1,5])$
(%t9)
```