

1 Ejercicio 1

```
(%i1) f(x):=log((2-x)^4/sqrt(2*x-1));
```

Warning: Can set maxima's working directory but cannot change it during the maxima session

```
(%i3) expand(taylor(f(x),x,1,2));p2(x):='';
```

```
(%o2) -x^2 - 3 x + 4 (%o3) p2(x):=-x^2 - 3 x + 4
```

```
(%i4) p2(2);
```

```
(%o4) -6
```

```
(%i6) expand(taylor(f(x),x,1,4));p4(x):='';
```

```
(%o5) x^4 - \frac{20x^3}{3} + 13x^2 - 15x + \frac{23}{3} (%o6) p4(x):=x^4 - \frac{20x^3}{3} + 13x^2 - 15x + \frac{23}{3}
```

```
(%i7) p4(2);
```

```
(%o7) -\left(\frac{23}{3}\right)
```

```
(%i8) wxplot2d([f(x),p2(x),p4(x)],[x,1,2],[y,-6,6]);
```

log: encountered log(0).

plot2d: expression evaluates to non-numeric value somewhere in plotting range.

plot2d: some values will be clipped.

