24. Piirrä edellä muodostettua datajoukkoa datat interpoloivanpolynomin ja paloittain interpoloivan neliöllisen polynomin kuvaajat.

```
datat = Table[{x, Sin[x]}, {x, 0, 10}] // N
```

```
{{0., 0.}, {1., 0.841471}, {2., 0.909297},
 {3., 0.14112}, {4., -0.756802}, {5., -0.958924}, {6., -0.279415},
 {7., 0.656987}, {8., 0.989358}, {9., 0.412118}, {10., -0.544021}}
```

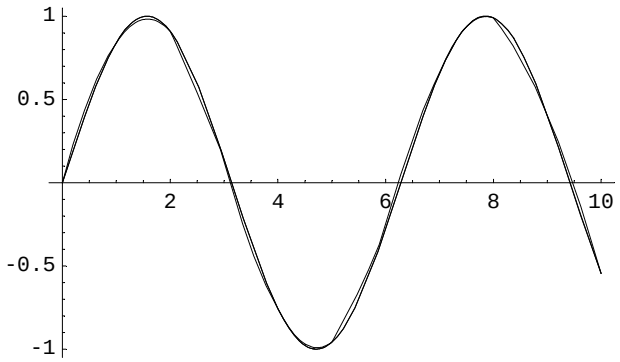
```
norsu = InterpolatingPolynomial[datat, x]
```

```
(0.841471 +
   (-0.386822 + (-0.0103932 + (0.0320258 + (-0.00541109 + (-0.000152322 + (0.000138457 +
                       (-0.0000134113 + (-3.97978 × 10^-7 + 1.73593 × 10^-7 (-9. + x))
                           (-8. + x)) (-7. + x)) (-6. + x))
                   (-5. + x)) (-4. + x)) (-3. + x)) (-2. + x)) (-1. + x)) (0. + x)
```

```
marsu = Interpolation[datat, InterpolationOrder → 2]
```

```
InterpolatingFunction[{{0., 10.}}, <>]
```

```
Plot[{marsu[x], norsu, Sin[x]}, {x, 0, 10}]
```

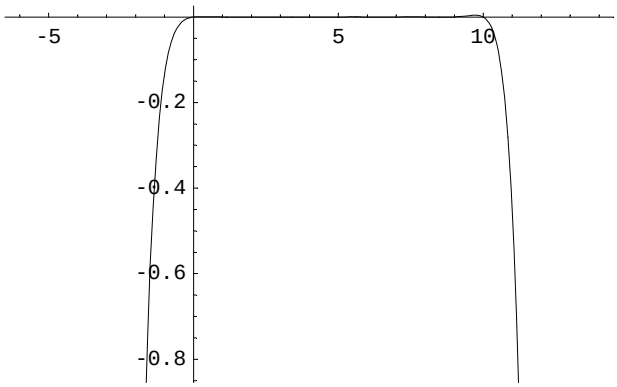



```
- Graphics -
```

25. Muodosta erotusfunktio Sin[x]-IntepolatingPolynomial ja piirrä sen kuvaaja.

```
Clear[f, x]
f[x_] := Sin[x] - norsu
```

In[110]:=
```
Plot[f[x], {x, -6, 14}]
```



Out[110]=
```
- Graphics -
```