

Lab 5

Hermite interpolation

1) In the following table there are some data regarding a moving car. Use Hermite interpolation to estimate position and speed of the car when the time is $t = 10$.

Time	0	3	5	8	13
Distance	0	225	383	623	993
Speed	75	77	80	74	72

2) Plot, in the same figure, the graphs of the function $f : [-5, 5] \rightarrow \mathbb{R}$, $f(x) = \sin 2x$ and of the corresponding Hermite interpolation polynomial, considering 15 equidistant nodes in $[-5, 5]$.