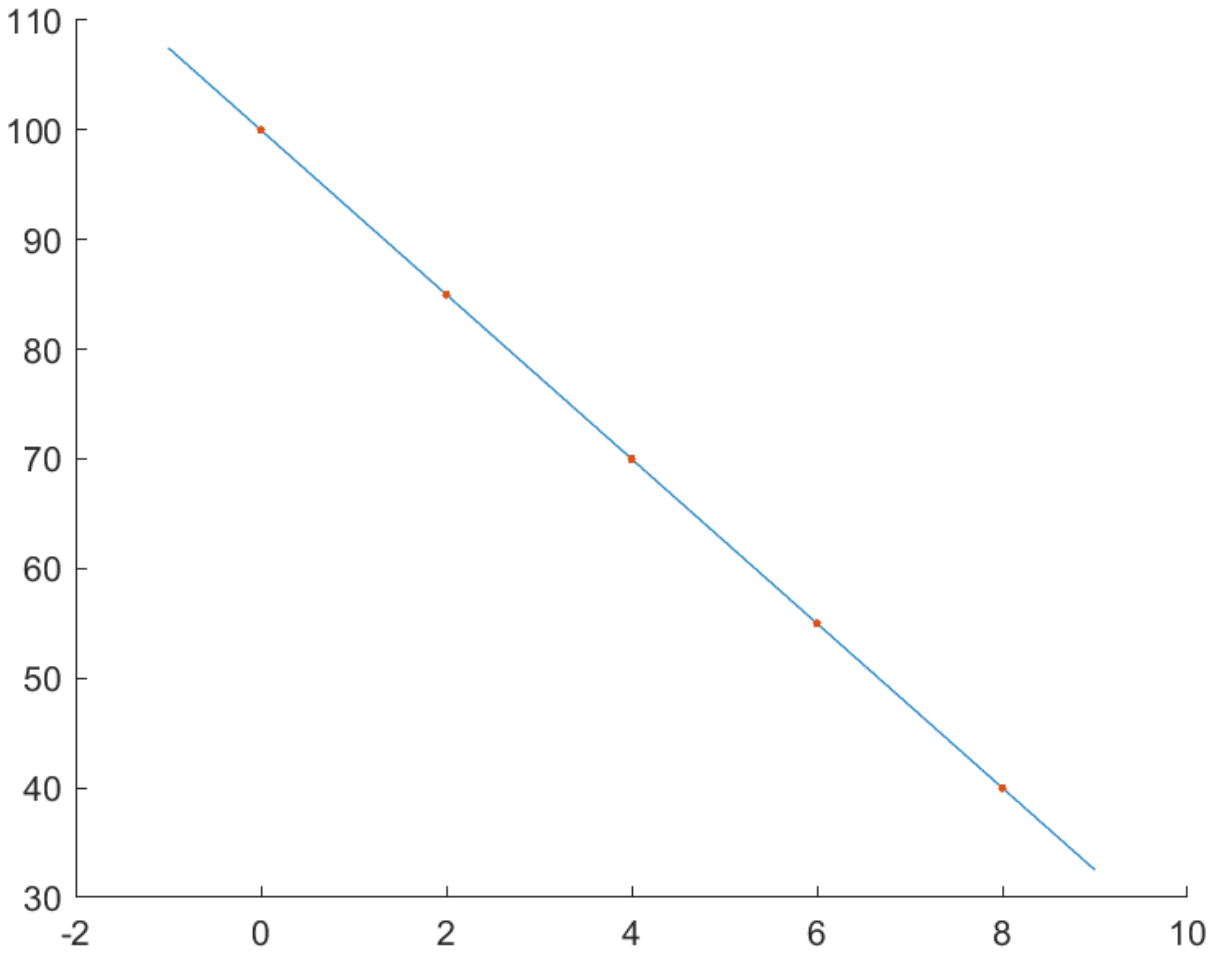
Problem-7

$$f_n(x) = \sum_{i=0}^{n} L_i(x) f(x_i)$$

$$L_i(x) = \prod_{j=0; j \neq i}^{n} \frac{x - x_j}{x_i - x_j}$$

$$R_n = f[x, x_n, x_{n-1}, ..., x_0] \prod_{i=0}^{n} (x - x_i)$$

The Output



The Lagrange plot with data points marked in orange. X on x-axis and T on y-axis.

```
>> T7_20110065([2.7, 3.2])

ans =

  79.750000000000014  76.000000000000000
```