

Below is the data given for thermal expansion coefficient of steel as a function of temperature.

Temperature	Instantaneous Thermal Expansion Coefficient
° F	μ in/in ° F
80	6.47
60	6.36
40	6.24
20	6.12
0	6.00
-20	5.86
-40	5.72
-60	5.58
-80	5.43
-100	5.28
-120	5.09
-140	4.91
-160	4.72
-180	4.52
-200	4.30
-220	4.08
-240	3.83
-260	3.58
-280	3.33
-300	3.07
-320	2.76
-340	2.45

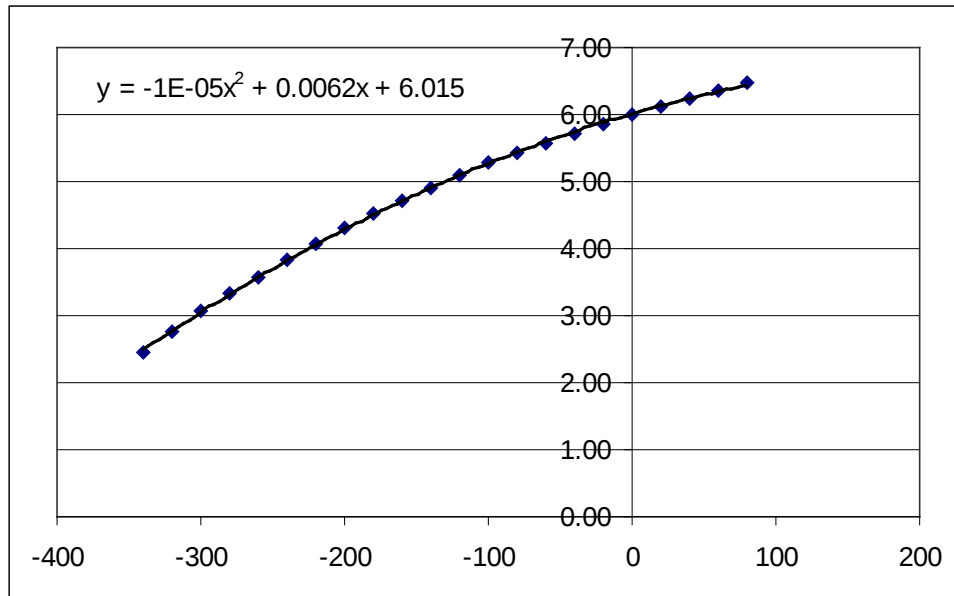


Figure 3 default trend line given by excel

Find predicted and residual value at $T = -300^{\circ}\text{F}$

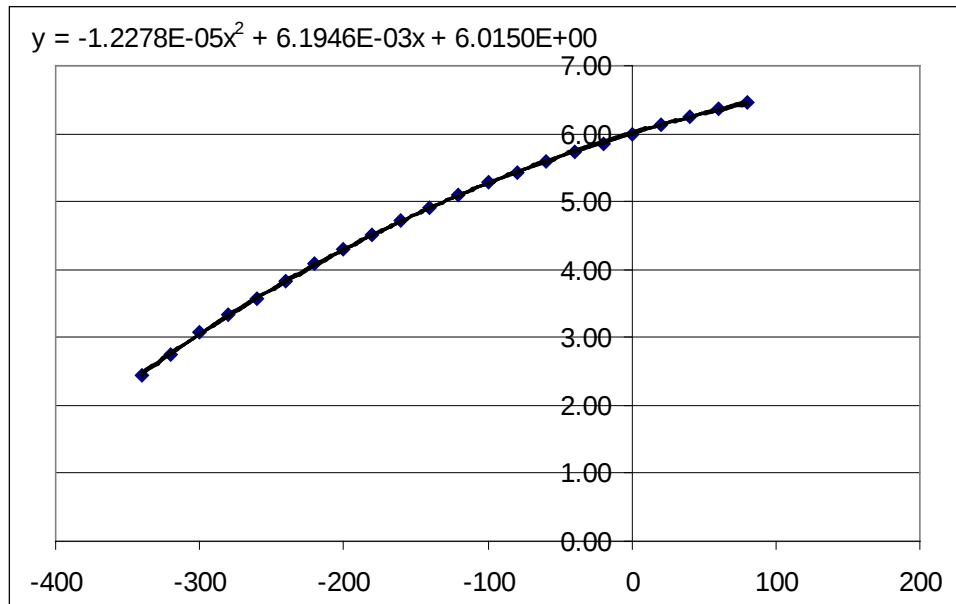


Figure 4 Trend line given by Excel using scientific format.

Find predicted and residual value at $T = -300^{\circ}\text{F}$