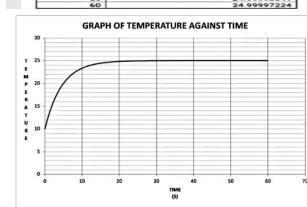


$$\begin{aligned}
 2C + 10 &= 20 \text{ at } 1^{\circ} \\
 2C &= 10 - 1 \\
 2C &= 9 \\
 C &= 4.5
 \end{aligned}$$

X(TIME)	V(TEMPERATURE, T=51 STEPS)	10
	0.22-AZ)	
0	12.96221803	
1	12.96221803	
2	12.97234988	
3	13.00234988	
4	13.04234988	
5	13.09234988	
6	13.15234988	
7	13.22234988	
8	13.29234988	
9	13.36234988	
10	13.33234988	
11	13.37234988	
12	13.41234988	
13	13.44234988	
14	13.47234988	
15	13.44234988	
16	13.44234988	
17	13.44234988	
18	13.44234988	
19	13.44234988	
20	13.44234988	
21	13.44234988	
22	13.44234988	
23	13.44234988	
24	13.42234988	
25	13.42234988	
26	13.42234988	
27	13.42234988	
28	13.42234988	
29	13.42234988	
30	13.42234988	
31	13.42234988	
32	13.42234988	
33	13.42234988	
34	13.42234988	
35	13.42234988	
36	13.42234988	
37	13.42234988	
38	13.42234988	
39	13.42234988	
40	13.42234988	
41	13.42234988	
42	13.42234988	
43	13.42234988	
44	13.42234988	
45	13.42234988	
46	13.42234988	
47	13.42234988	
48	13.42234988	
49	13.42234988	
50	13.42234988	
51	13.42234988	
52	13.42234988	
53	13.42234988	
54	13.42234988	
55	13.42234988	
56	13.42234988	
57	13.42234988	
58	13.42234988	
59	13.42234988	
60	13.42234988	



16. Cooling
exponential behaviour
decrease all
etc
Close all
squares but
 $\log y = 60$
 $\log y = -25 - 0.016 \ln(t) + 77.16$
In a graph
Plot (T, T)
 \Rightarrow Least squares fit
 \Rightarrow Linear (Exponential) fit
 \Rightarrow Plot of Temperature (T) against $\ln(t) + 77.16$
and then
first minute

17. The steady state value of the temperature is $25^\circ C$ & $80^\circ C$ of the exponential approach
 v As t tends to infinity the temperature approaches the steady state value $= 25^\circ C$.

