

ADOLLA LAUBAL ISHAKWAMAM
16/10/2020 10:29
MECHANICS

$T_1 = 10^\circ\text{C}$, $T_0 = 20^\circ\text{C}$
 Time taken = 5 minutes = 300 seconds
 Actual temp = $(T) = 24.1^\circ\text{C}$
 \therefore time $(2T) = 2 \times$
 $\therefore \Delta T = 20^\circ\text{C} - 10^\circ\text{C} = 10^\circ\text{C}$
 $\therefore 6^\circ\text{C} = \frac{1}{2}$ of 5 mins
 $5^\circ\text{C} = 2.5 \text{ min}$ to move from 20°C
 to 25°C
 $\therefore 2.5^\circ\text{C} = 2.5 \text{ min}$
 $\therefore 24.1^\circ\text{C} = ?$
 $= \frac{2.5 \times 24.1}{2.5^\circ\text{C}} \times 2.5 \text{ min} = 150.3 \text{ sec}$
 $\therefore = \frac{150.3 \times 24.1}{2.5} = 6 \times 24.1 \times 149.4$
 $\therefore 149.4 \div 60$
 $= 2.49 \approx 2.5 \text{ min}$ after

```

commandwindow
clear
clc
close all
format short g
mdata=xlread('onlinequizdata','fluiddata')
x=mdata(1:2:250,1)
y=mdata(1:2:250,2)
plot(x,y)
grid on
grid minor

```

I

Command Window

```

86
88
90
92
94
96
98
100
102

```

script Ln 11 Col 11