



# Question 1

$$T_i \text{ of thermometer} = 10^\circ\text{C}$$

$$T_o \text{ of temperature} = 20^\circ\text{C}$$

$$\text{Time taken} = 5 \text{ minutes} = 300 \text{ secs}$$

$$\text{Actual Temp} = (CT) = 24.9^\circ\text{C}$$

$$2 \text{ time } (2T) = ?$$

$$\text{If from } 1T \text{ to } 2T = 20^\circ\text{C} - 10^\circ\text{C} = 10^\circ\text{C}$$

and it takes 5 mins to cover  $10^\circ\text{C}$

$$5^\circ\text{C} = \frac{1}{2} \text{ of } 5 \text{ mins}$$

$$= 5^\circ\text{C} = 2.5 \text{ mins (to ~~make~~ move from } 20^\circ\text{C}$$

to  $25^\circ\text{C}$ )

$$\text{or } 25^\circ\text{C} = 2.5 \text{ m}$$

$$24.9^\circ\text{C} = ?$$

$$= \frac{2.5 \times 24.9}{25} \quad [25 \text{ min} = 150 \text{ secs}]$$

$$= \frac{150 \times 24.9}{25}$$

$$= 6 \times 24.9 = 149.4$$

$$\therefore 149.4 \div 60$$

$$= 2.49 \approx 2 \text{ mins.}$$

Correction. I will remove this soon so write it snap and submit

```
yimaquiz2.m x +  
- commandwindow  
- clear  
- clc  
- close all  
- format short g  
- mdata=xlsread('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  
fx 102