

1. Initial temp,  $T_0 = 10^\circ\text{C}$   
Temperature after 5 mins  $T_1 = 20^\circ\text{C}$   
Final temp,  $T_2 = 25^\circ\text{C}$

Thus, it took 5 mins for the temperature to rise by  $(T_1 - T_0) = (20 - 10) = 10^\circ\text{C}$ .

Time taken to reach  $25^\circ\text{C} =$

$$\frac{T_2 - T_0}{T_1 - T_0} \times 5$$

$$= \frac{25 - 10}{20 - 10} \times 5$$

$$= \frac{15}{10} \times 5 = 7.5 \text{ mins after}$$

the thermometer is inserted in the system.

```
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  
102
```



