

El. Ikklu - Emmanuel 18/10/2020 (2)

Question One:

T_1 of thermometer = 10°C

T_2 of thermometer = 20°C

Time taken = 5 minutes = 300 seconds

$\Delta T = 20 - 10 = 10^\circ\text{C}$

Final $T = 24.9^\circ\text{C}$ $\Delta T_c = 24.9 - 10 = 14.9^\circ\text{C}$

$10^\circ\text{C} \rightarrow 300\text{secs}$

$10^\circ\text{C} \rightarrow 300\text{secs}$

$10^\circ\text{C} \rightarrow 300 \times 14.9$

$10^\circ\text{C} = 4470$

divide both sides by 10x

$$\frac{4470}{10} = 447$$

10

$20 = 447 \text{ Seconds} \quad 7 \text{ minutes } 27 \text{ seconds}$

Command window

clear

clc

close all

format short g

mdata = xlsread('onlinequiz\data', 'fluid\data')

X = mdata(:, 2:250, 1)

Y = mdata(:, 2:250, 2)

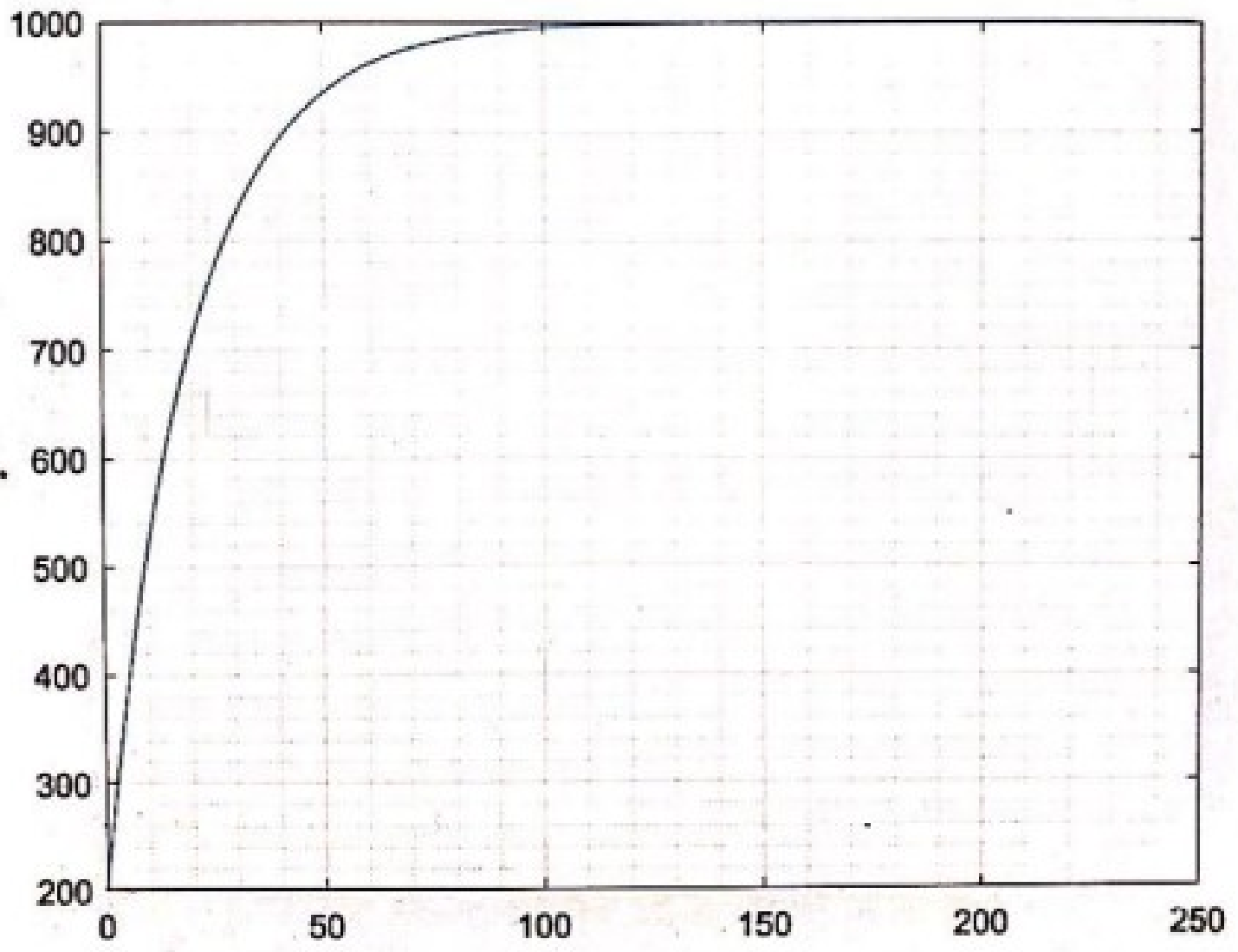
plot(X, Y)

grid on

grid minor

Figure 1

File Edit View Insert Tools Desktop Window Help



```
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