

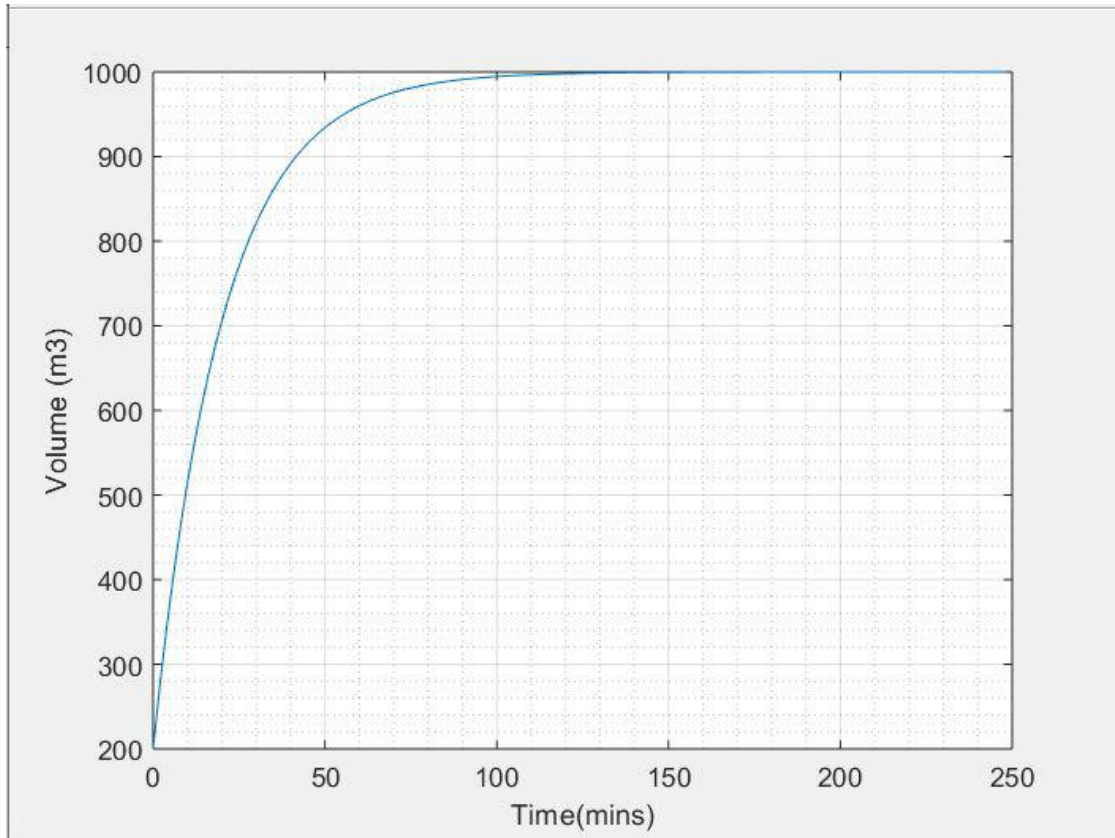
EKOK NZIE OKPOKAM
18/ENG05/045
MECHATRONICS
MATHS QUIZ

1.

```
1      commandwindow
2      clearvars
3      clc
4      close all
5
6      format shortg
7      ekok = xlsread('onlinequizdata.xlsx', 'fluiddata')
8      x = ekok(1:2:250,1)
9      y = ekok(1:2:250,2)
10     plot(x,y)
11     xlabel('Time (mins)')
12     ylabel('Volume (m3)')
13     grid on
14     grid minor
```

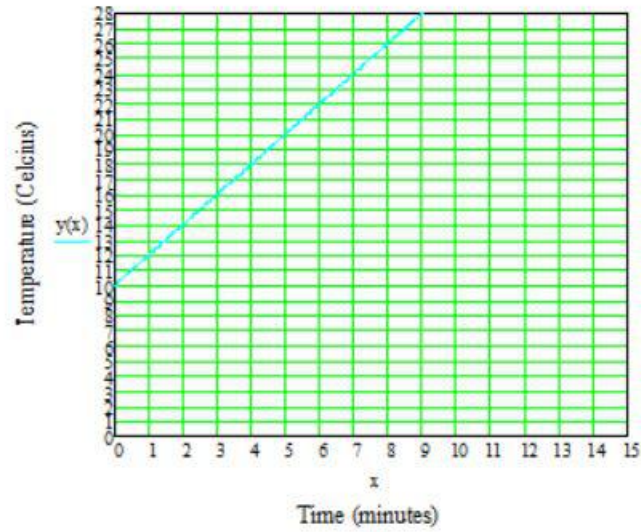
Command Window
fx >>

2.



3.

$$y(x) := 2x + 10$$



when $t = 0$
 $y = m(t) + c$
 $y = 10$
 $m = 2$
 $c = 10$

equation;
 $2t + 10$

 $y = 24.9$
 $t = (24.9 - 10) / 2$
 $t = 7 \text{ minutes } 27 \text{ seconds}$

$t := 0, 0.1..15$

t =	T(t) =
0	10
0.1	10.2
0.2	10.4
0.3	10.6
0.4	10.8
0.5	11
0.6	11.2
0.7	11.4
0.8	11.6
0.9	11.8
1	12
1.1	12.2
1.2	12.4