UNIVERSIDAD FIDELITAS

Escuela de Ingeniería Eléctrica

Control automático

Tarea#8

Realizado por:

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Profesor:

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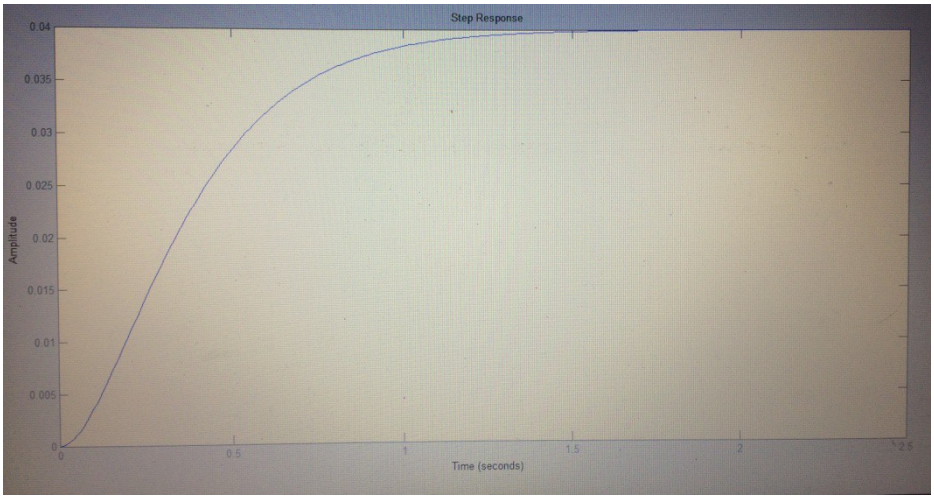
Parte en matlab:

```
>> A=tf([0 0 1],[1 10 24])

A =

        1

  ---------------

  s^2 + 10 s + 24

Continuous-time transfer function.

>> W=feedback(A,1)

W =

        1

  ---------------

  s^2 + 10 s + 25

Continuous-time transfer function.

>> step(W)
```




```
>> E=feedback(1,W)
```

E =

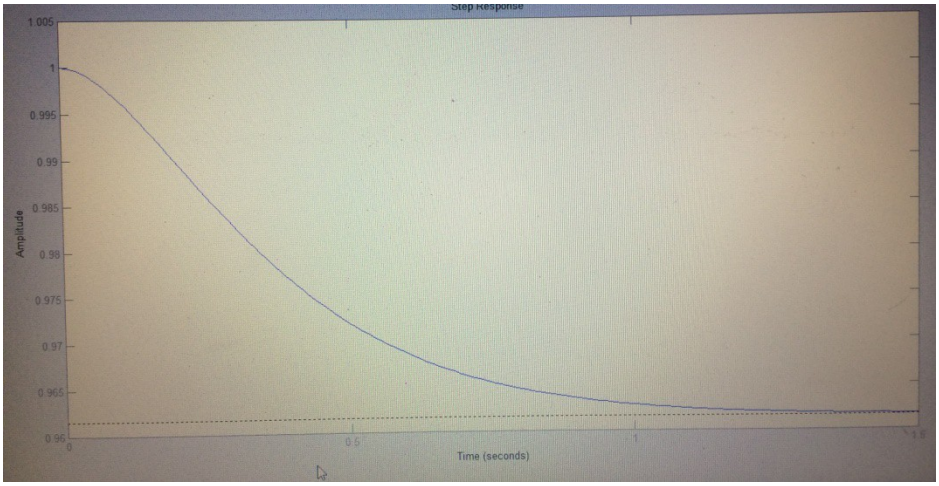
s^2 + 10 s + 25

---

s^2 + 10 s + 26

Continuous-time transfer function.

>> step(E)



>> P=tf([1 1.25],[1 1])

P =

s + 1.25

---

s + 1

Continuous-time transfer function.

>> S=series(A,P)

S =

s + 1.25

---

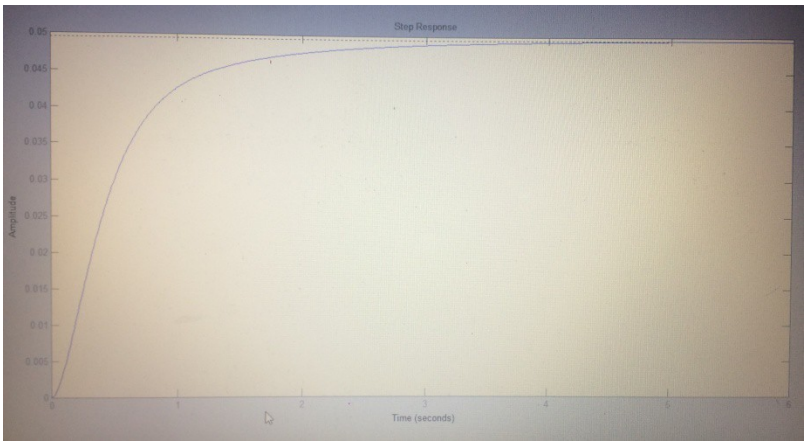
s^3 + 11 s^2 + 34 s + 24

Continuous-time transfer function.

```
>> F=feedback(S,1)

F =

          s + 1.25
  ----------------------------

  s^3 + 11 s^2 + 35 s + 25.25
```

Continuous-time transfer function.

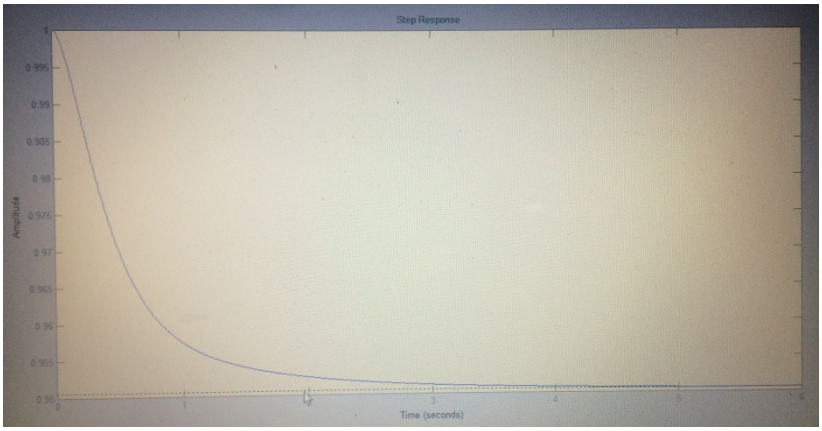
```
>> step(F)
```



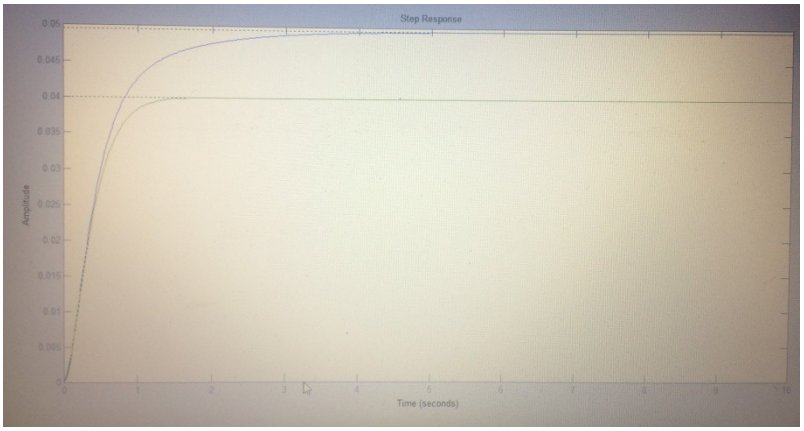

```
>> M=feedback(1,S)

M =

    s^3 + 11 s^2 + 34 s + 24
  ----------------------------

  s^3 + 11 s^2 + 35 s + 25.25
```

Continuous-time transfer function.

>> step(M)



>> step(F,W,10)



Parte hecha a mano: