CSE-461 ASSIGNMENT 3

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SECTION: 09

(1)

ID: 21 10 12 98   Section: 09

A = 98

B = 21

C = 12
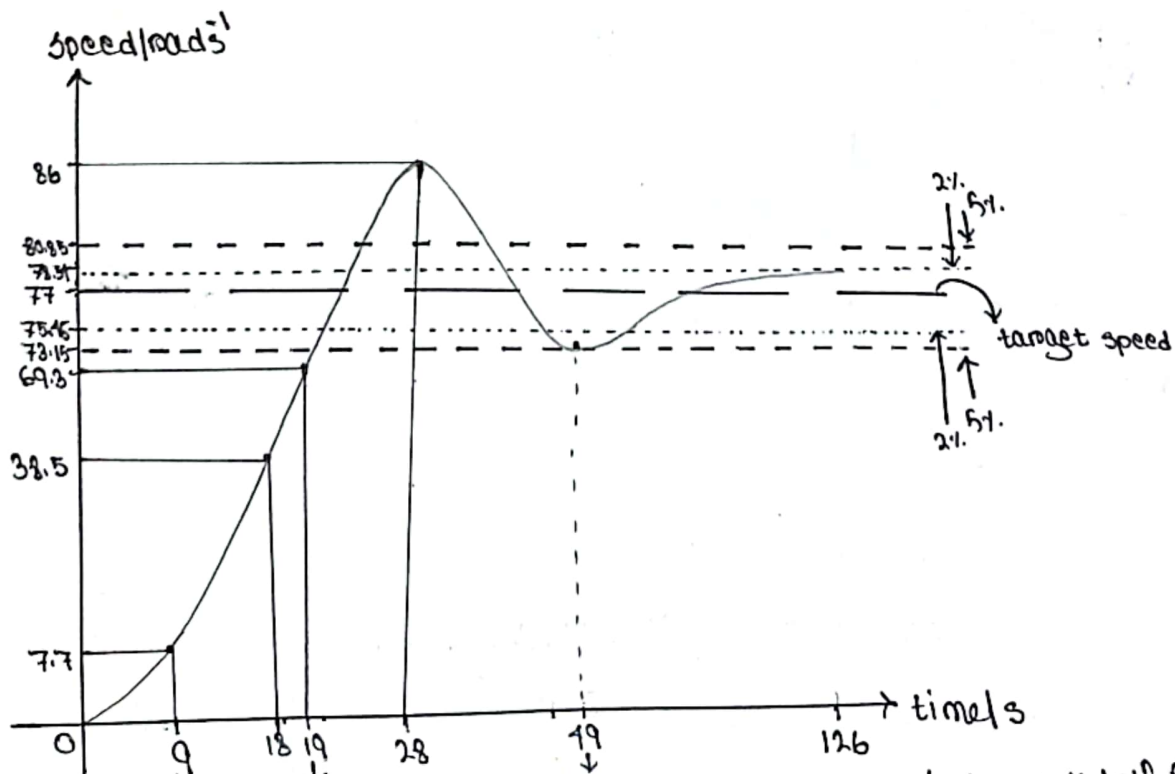
D = 10

E = 9

$Z = A - B$

$Z = 77$ rad/s

time /s	speed /rad s⁻¹
1 E = 9	0.1 * Z = 7.7
E + E = 18	0.5 * Z = 38.5
D + E = 19	0.9 * Z = 69.3
D + E + E = 28	Z + E = 86
D + E + E + B = 49	5% of Z = Z ± 3.85 [73.15, 80.85]
D + E + E + A = 126	2% of Z = Z ± 1.64 [75.46, 78.54]

2) Outburst = $\dfrac{86 - 77}{77} * 100\%$

Outburst = 11.69%

rise time = t2 - t1
= 19 - 9

rise time = 10s

using peak bet⁰ 5% of Z :-
settling time = t3
settling time = 49s