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Started on Thursday, 5 August 2021, 12:20 PM

State Finished

Completed on Thursday, 5 August 2021, 12:31 PM

Time taken 11 mins 14 secs

Grade 8.00 out of 10.00 (80%)

Question 1

Partially correct

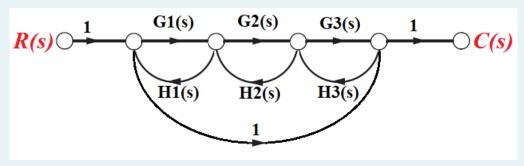
Mark 8.00 out of 10.00

Answer the questions below, (Insert the numerical value only, do not use <,>,+, *, or /)

The Relative error for your answer should be less than 0.01, which means if the answer was 50, then the error should not exceed $50*0.01 = \pm 0.5!$

if the answer was 230, then the error should not exceed 230 $^{*}0.01 = \pm 2.3!$

if the answer was 2.31467*10^-3, then you should enter this value: 0.00231467, not this 0.0023 !!!!



If G1(S)=G2(S)=G3(S)=S, H1(S)=-3, H2(S)=-6, H3(s)=12.

Find the transfer function for the following system shown using Mason's Rule. Follow this Form:

$$\frac{C(S)}{R(S)} = \frac{(K1)S^3 + (K2)S^2 + (K3)S + (K4)}{(K5)S^3 + (K6)S^2 + (K7)S + (K8)}$$

where K1, K2, K3, K4,K5, K6, K7 and K8 are constants, note that the value of **K1 is given in order to have a unique solution**, so, **the value of K1 is 1**. the other constants will be as follow:

the value of K2 is: 0

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One possible correct answer is: 0

the value of K3 is: 6

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One possible correct answer is: 6

the value of K4 is: 1

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One possible correct answer is: 1

the value of K5 is: 0

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One possible correct answer is: 0



Quiz #4 ▶