

Find solutions for your homework

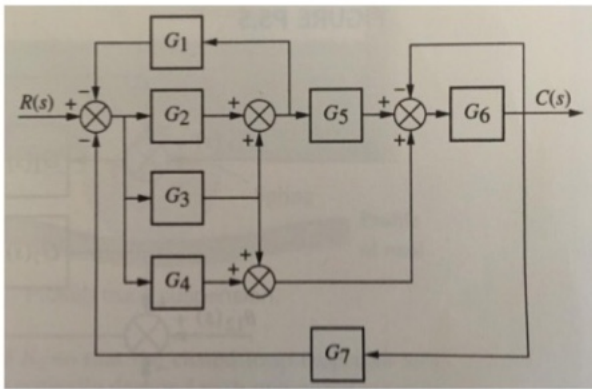
home / study / engineering / electrical engineering / electrical engineering questions and answers / find the equivalent transfer function, $t(s) = c(s)$...

Question: Find the equivalent transfer function, $T(s) = C(s)/R(s)$, for the sy...

(4 bookmarks)

Problem 4:

Find the equivalent transfer function, $T(s) = C(s)/R(s)$, for the system shown below.



Show transcribed image text

Expert Answer

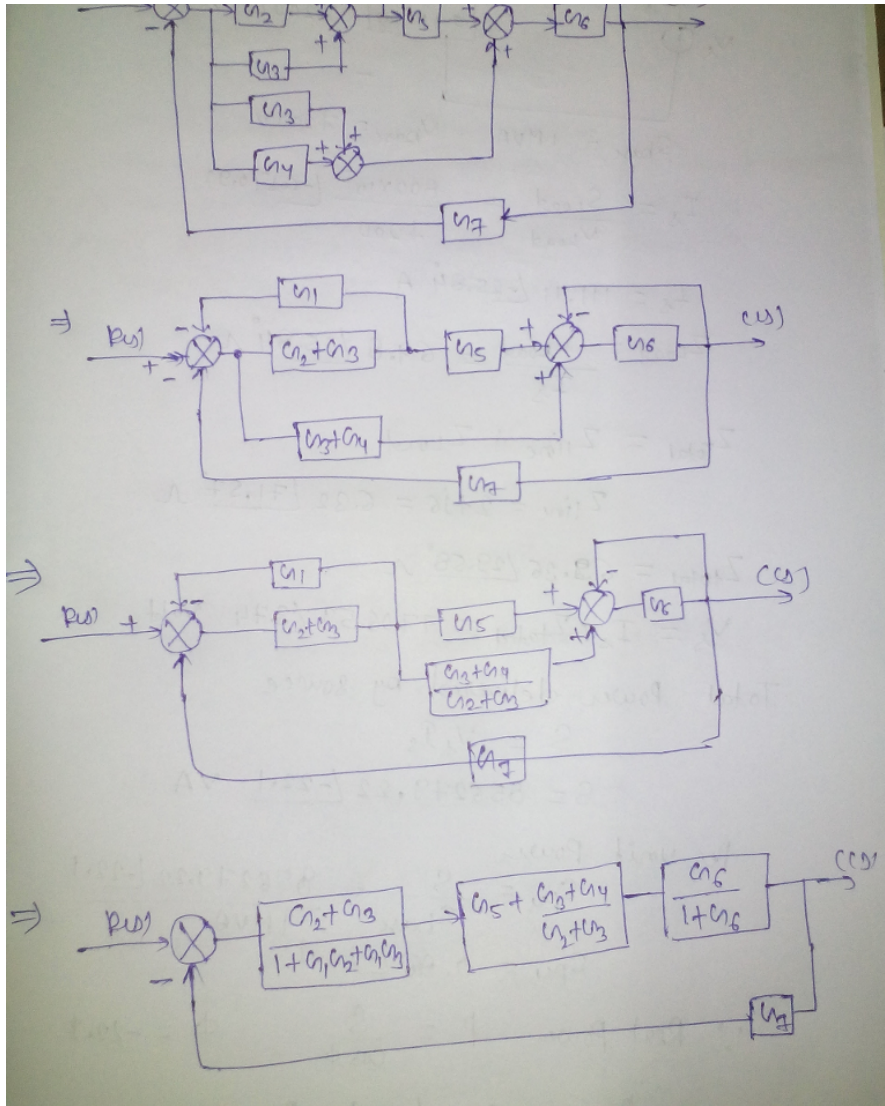
Anonymous answered this
49 answers

Was this answer helpful?

Snap a photo from your phone to post a question
We'll send you a one-time download link

888-888-8888

By providing your phone number, you agree to receive a one-time automated text message with a link to get the app. Standard messaging rates may apply.



$$\Rightarrow \left(\frac{c_2 + c_3}{1 + c_1 c_2 + c_1 c_3} \right) \left(\frac{c_5 c_2 + c_5 c_3 + c_3 + c_4}{c_2 + c_3} \right) \left(\frac{c_6}{1 + c_6} \right)$$

$$\Rightarrow \frac{c_6 [c_5 c_2 + c_5 c_3 + c_3 + c_4]}{(1 + c_6) (1 + c_1 c_2 + c_1 c_3)}$$

$$\Rightarrow \frac{C(s)}{R(s)} = \frac{c_6 [c_5 c_2 + c_5 c_3 + c_3 + c_4]}{(1 + c_6) (1 + c_1 c_2 + c_1 c_3) + c_7 c_6 [c_5 c_2 + c_5 c_3 + c_3 + c_4]}$$

$$\frac{C(s)}{R(s)} = \frac{c_3 + c_4 + c_2 c_5 c_6 + c_3 c_5 c_6}{1 + c_1 c_2 + c_1 c_3 + c_6 + c_1 c_2 c_6 + c_1 c_3 c_6 + c_7 c_6 [c_5 c_2 + c_5 c_3 + c_3 + c_4]}$$

Comment >

Practice with similar questions

Q: Find the equivalent transfer function, $T(s) = C(s)/R(s)$, for the system shown below;

A: [See answer](#)

Q: Find the equivalent transfer function, $T(s) = C(s)/R(s)$, for the system shown below.

A: [See answer](#)

Questions viewed by other students

Q: Find the equivalent transfer function, $T(s) = C(s)/R(s)$, for the system shown in Figure P5.3.

A: [See answer](#) 100% (1 rating)

Q: Find the transfer function, $T(s) = C(s)/R(s)$ for the system shown below.

A: [See answer](#)

[Show more](#) 

COMPANY 

LEGAL & POLICIES 

CHEGG PRODUCTS AND SERVICES 

CHEGG NETWORK 

CUSTOMER SERVICE 



© 2003-2021 Chegg Inc. All rights reserved.