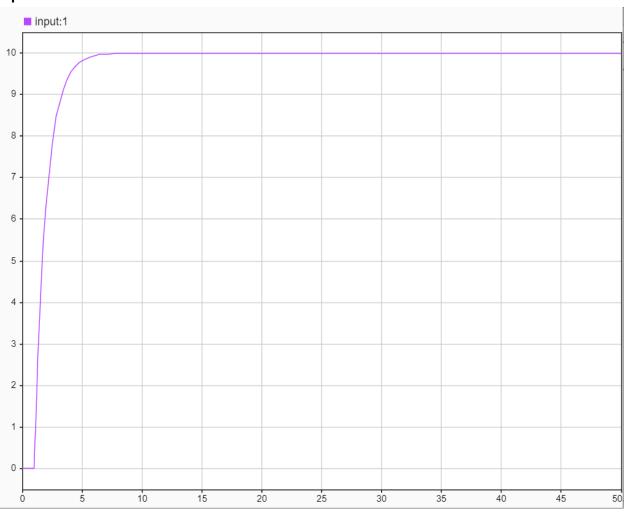
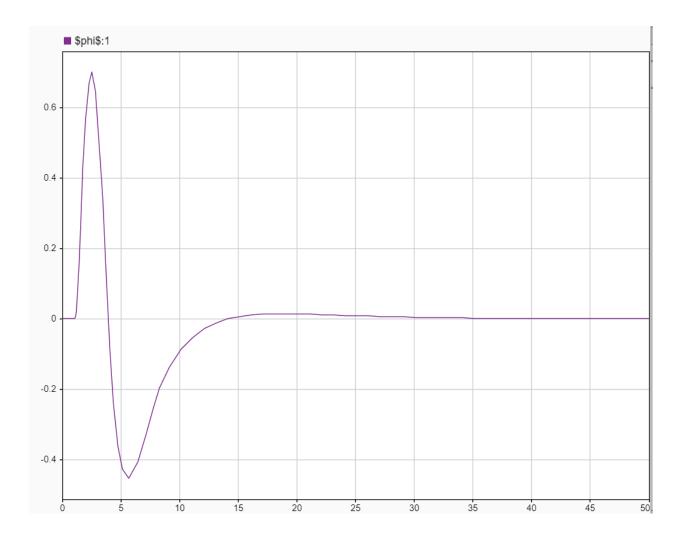
# Question 5:

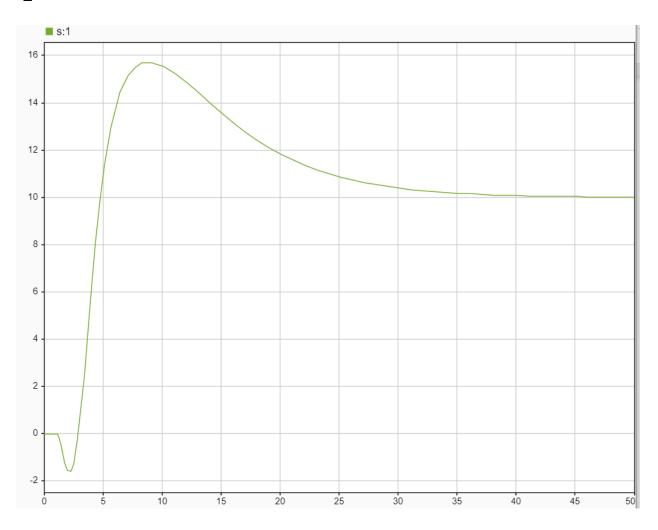
#### Input:



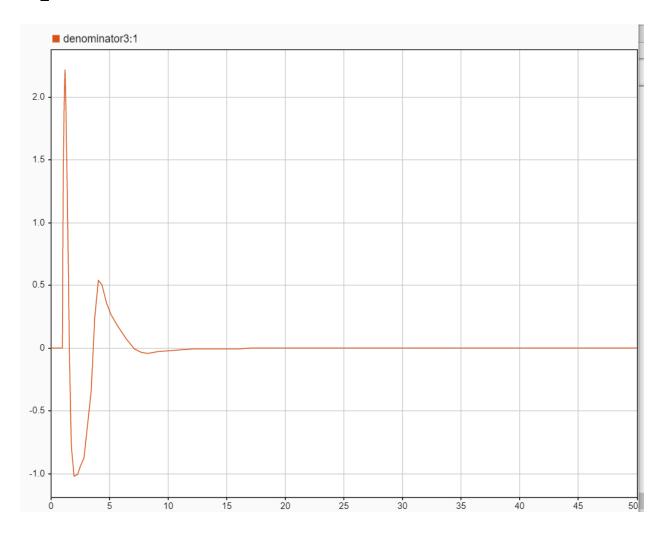
#### Phi:



## S\_bar:



### Phi\_dot:



S\_bar\_dot:

