

Quizzes of TTK4225 - Systems Theory, Autumn 2020

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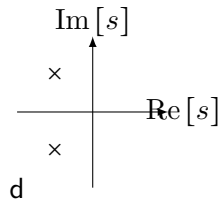
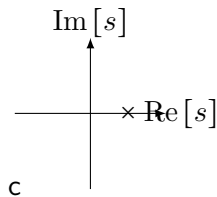
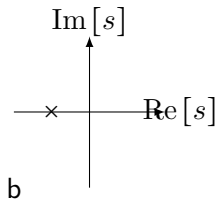
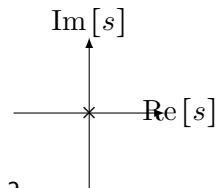
Question 109

A strictly proper linear time-invariant system will always have a step-response that starts in 0

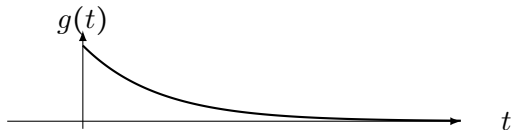
- ① true
- ② false
- ③ I do not know

Question 110

Which of the pole zeros plots



corresponds to the following impulse response?



1 a

2 b

Question 111

Can a LTI system have isolated equilibria?

- 1 yes
- 2 no
- 3 it depends
- 4 I do not know

Question 112

Can a LTI system have equilibria of different types?

- 1 yes
- 2 no
- 3 it depends
- 4 I do not know

Question 113

Can a BIBO LTI system have more than just one equilibrium?

- 1 yes
- 2 no
- 3 it depends
- 4 I do not know

Question 114

Can a BIBO LTI system have simply stable equilibria?

- 1 yes
- 2 no
- 3 it depends
- 4 I do not know

Question 115

Can a delayed LTI system be BIBO stable?

- 1 yes
- 2 no
- 3 it depends
- 4 I do not know

Question 116

Can a non-causal LTI system be BIBO stable?

- ① yes
- ② no
- ③ it depends
- ④ I do not know