

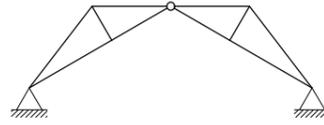
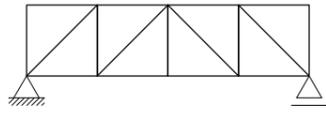
Task 1 Statical Determinacy

Draw the possible reaction forces for each form diagram.

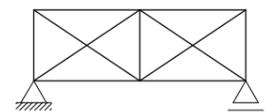
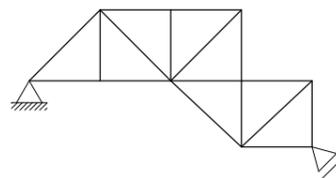
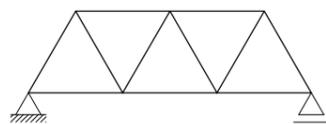
a) Determine the degree of external statical determinacy.

b) Determine the degree of internal statical determinacy.

a)

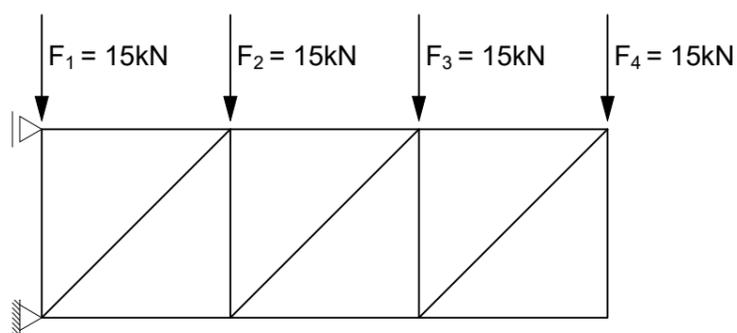


b)



Task 2 Truss cantilever

Draw the corresponding force diagram for the given case. Indicate tension forces with red and compression forces with blue. Determine the relevant tension and compression forces within the truss.



form diagram 1:100

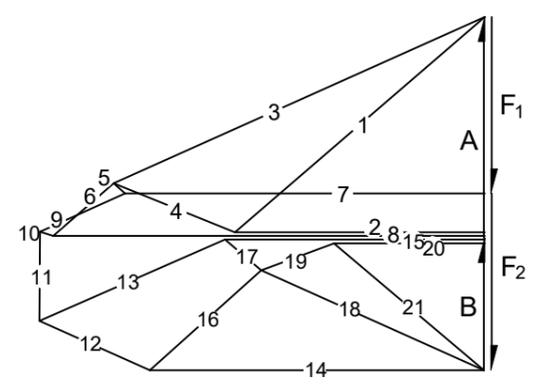
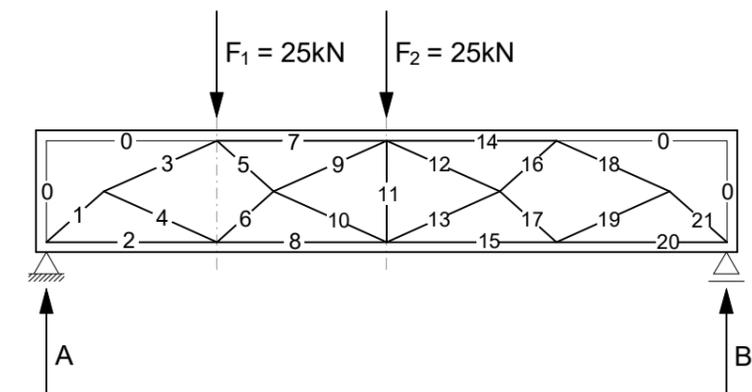
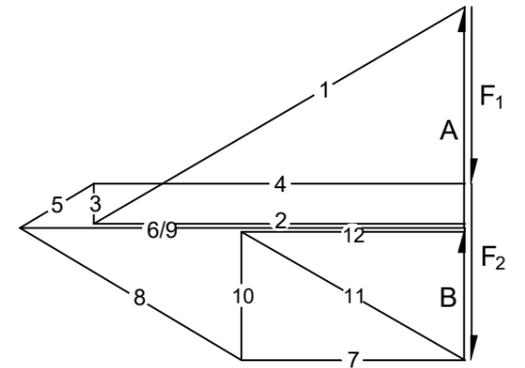
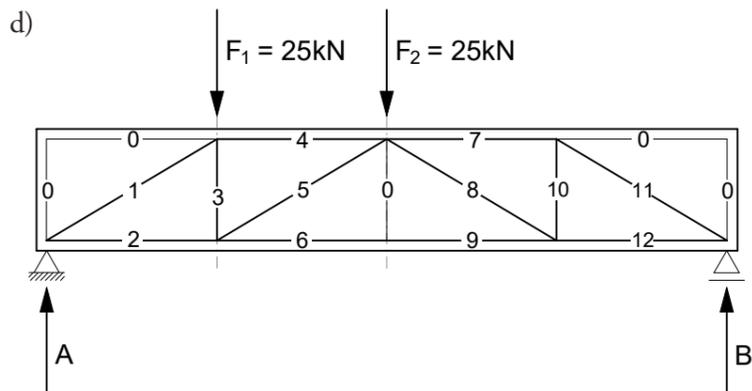
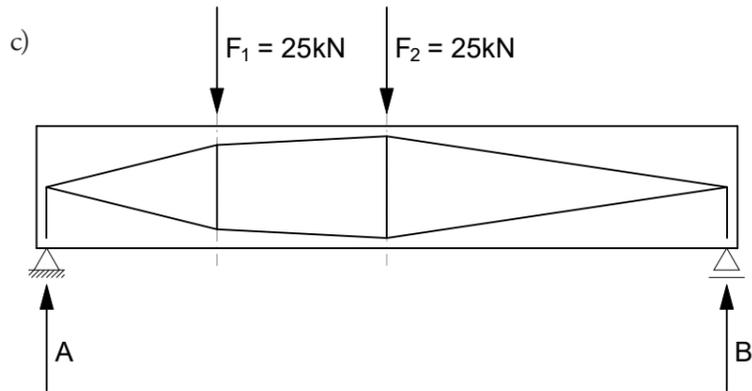
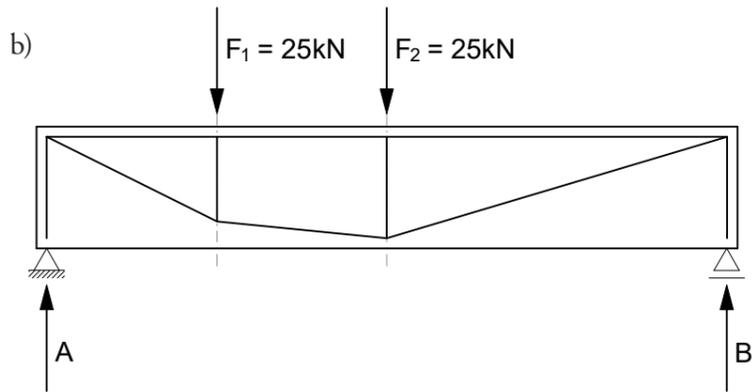
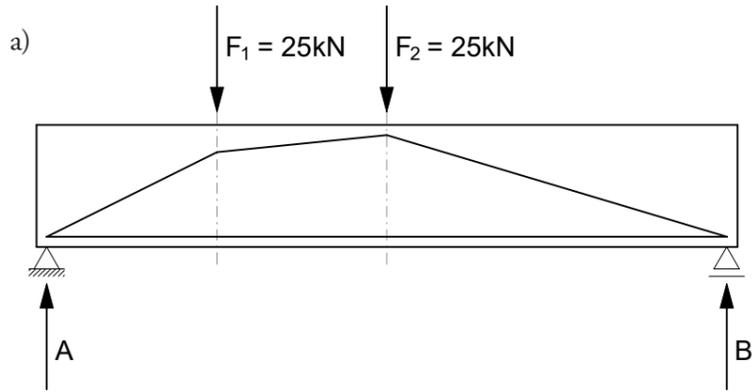
force diagram 1cm ≙ 10kN

subsystem

	$F_{c,max}$	$F_{t,max}$
Force [kN]		

Task 3 Internal Force Distribution in a Simple Beam

Draw the force diagrams for the given distribution of internal forces for the beams in a) - c). For the cases d) and e), the force diagram is already provided. Indicate tension forces with red and compression forces with blue. Compare in f) the distribution of internal forces in a) - c) with the versions in d) and e).



form diagrams 1:100

force diagrams 1cm ≙ 10kN

f)
