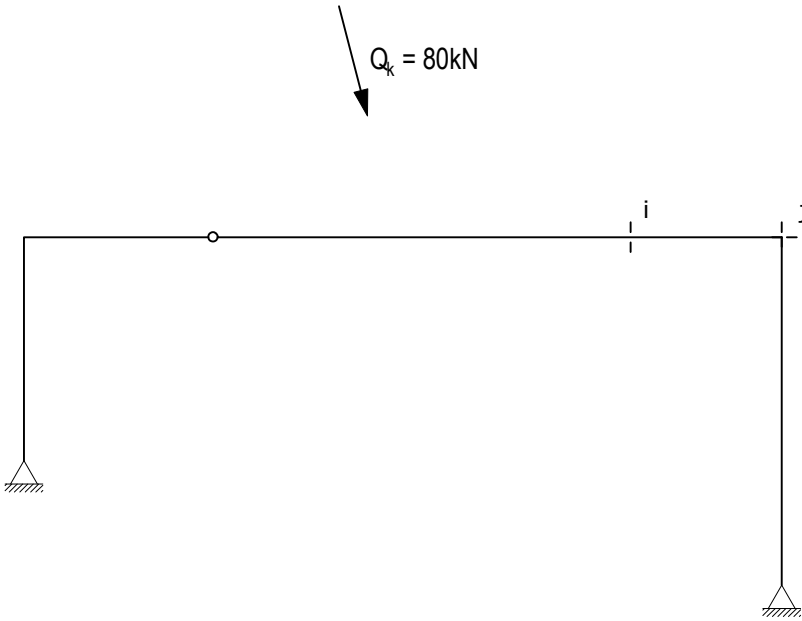


Task 1 Bendingmoment in frame owing to point load

Calculate the bendingmoment with help of the support line in the frame, in point i and point j. Dimension the frame in steel S355 and find a IPE-profile.

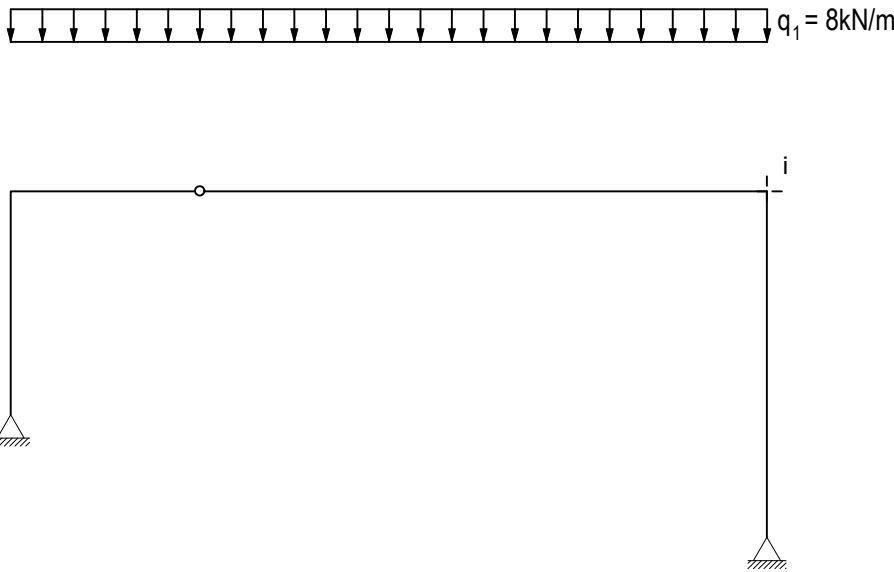


Form diagram 1:100

1 cm $\hat{=}$ 10 kN
Force diagram

Task 2 Bendingmoment in frame owing to line load

Calculate the bendingmoment with help of the support line in the frame, in point i and the hinge.



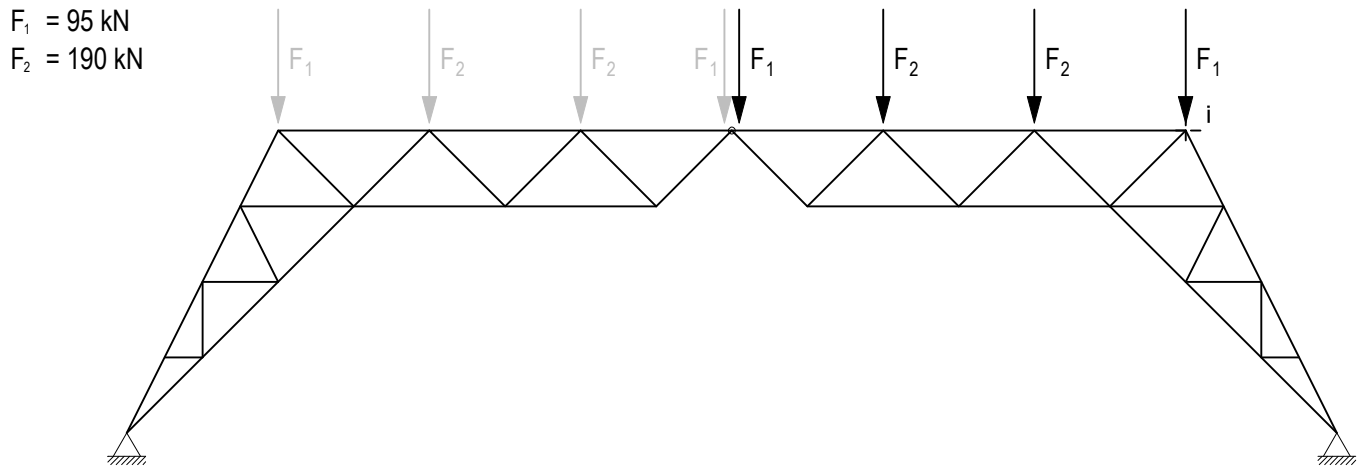
Form diagram 1:100

1 cm $\hat{=}$ 10 kN
Force diagram

Task 3 Three-hinged truss frame

Determine the support forces A and B of the three-hinged truss frame by the use of Superposition and calculate the bending moment in point i.

Right side

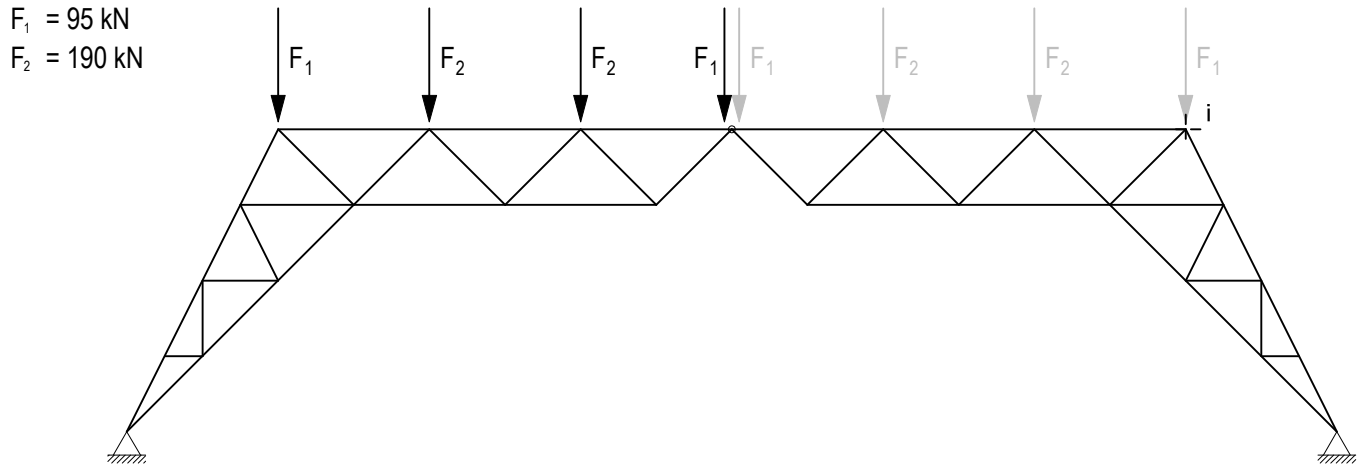


1 cm ≙ 100 kN

Force diagram

Form diagram 1:200

Left side



1 cm ≙ 100 kN

Force diagram

Form diagram 1:200

Superposition of the support force

1 cm ≙ 100 kN

Force diagram