

Remarks: See § 2.1, page 24 till 27

Hint:

The resultant of F_1 and F_2 has no component orthogonal on the dotted line, from which follows: $F_1 \sin 30^\circ = F_2 \sin \alpha$

Answers:

a. $F_1 = 14,64 \text{ kN}$; $F_2 = 10,35 \text{ kN}$

b. $\alpha = 60^\circ$
 $F_1 = 17,32 \text{ kN}$; $F_2 = 10,0 \text{ kN}$