

Remarks: See § 2.1, page 24 till 27

Hint:

The resultant of F_1 and F_2 has no component orthogonal with respect to the dotted force, from which follows: $F_1 \sin 60^\circ = F_2 \sin 30^\circ$.

Answers:

$$F_2 = 1732 \text{ N}$$