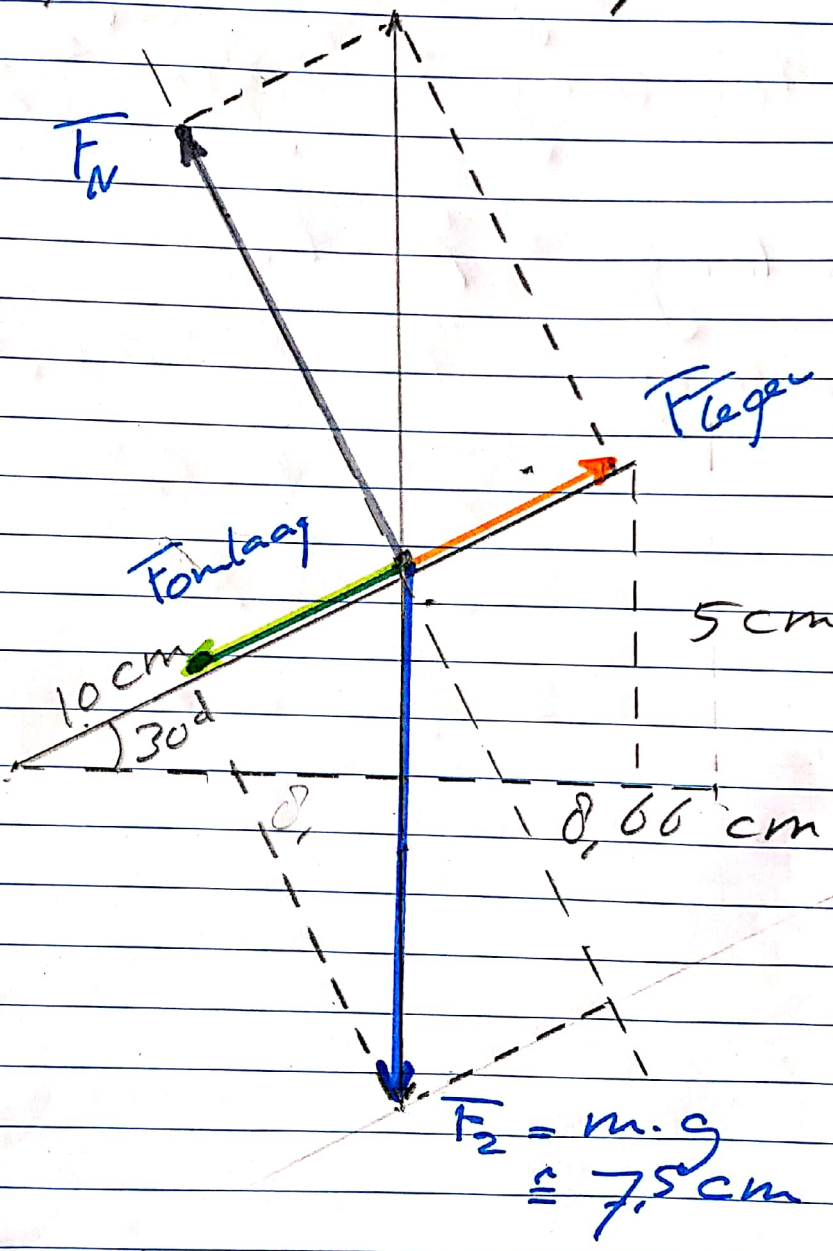
Newton H4 §4.4 pag 147.

6) 75,0 kg ≙ ~ 750 N

750 N ≙ 7,5 cm



6 a schuine zijde = 10 cm
overstaande = 5 cm
hoek α = 30°

aanliggende zijde = 8,66 cm

6 b zie figuur ⇒

6 b/c zie figuur

6 d $F_{omlaag} = -F_{tegen}$

$F_{omlaag} + F_{tegen} \triangleq 7,5$ cm

$F_{omlaag} = \frac{1}{2} F_z$

$F_{omlaag} = F_z * \sin 30°$

$= 750 * 0,5$

$= 375$ N

$\triangleq 3,8$ cm.

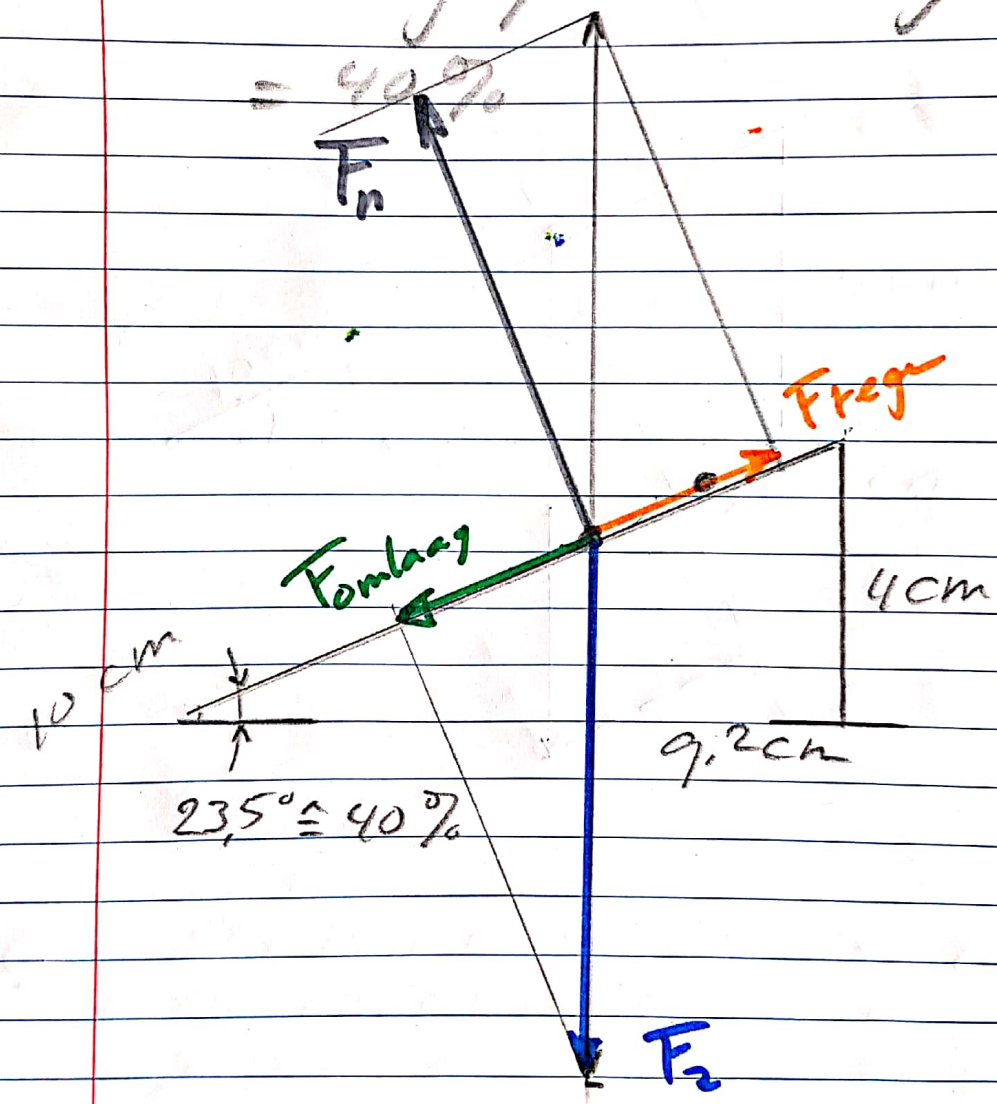
62 $x = 9{,}2$ cm | hypt = 10 cm
$y = 4{,}0$ cm |

a/b $\alpha = \text{invtan}(4{,}0/9{,}2) = 23{,}5°$

schuine 25cm is 10 cm (Pythagoras)

Helling percentage $= \frac{4{,}0}{10{,}0}$

$= 40\%$



$F_{omlaag} = 3{,}0$ cm ≙ 30 dN

$750 * \sin 23{,}5° = 299$ N ; QED