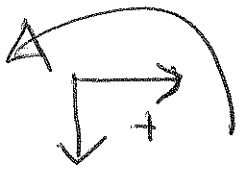
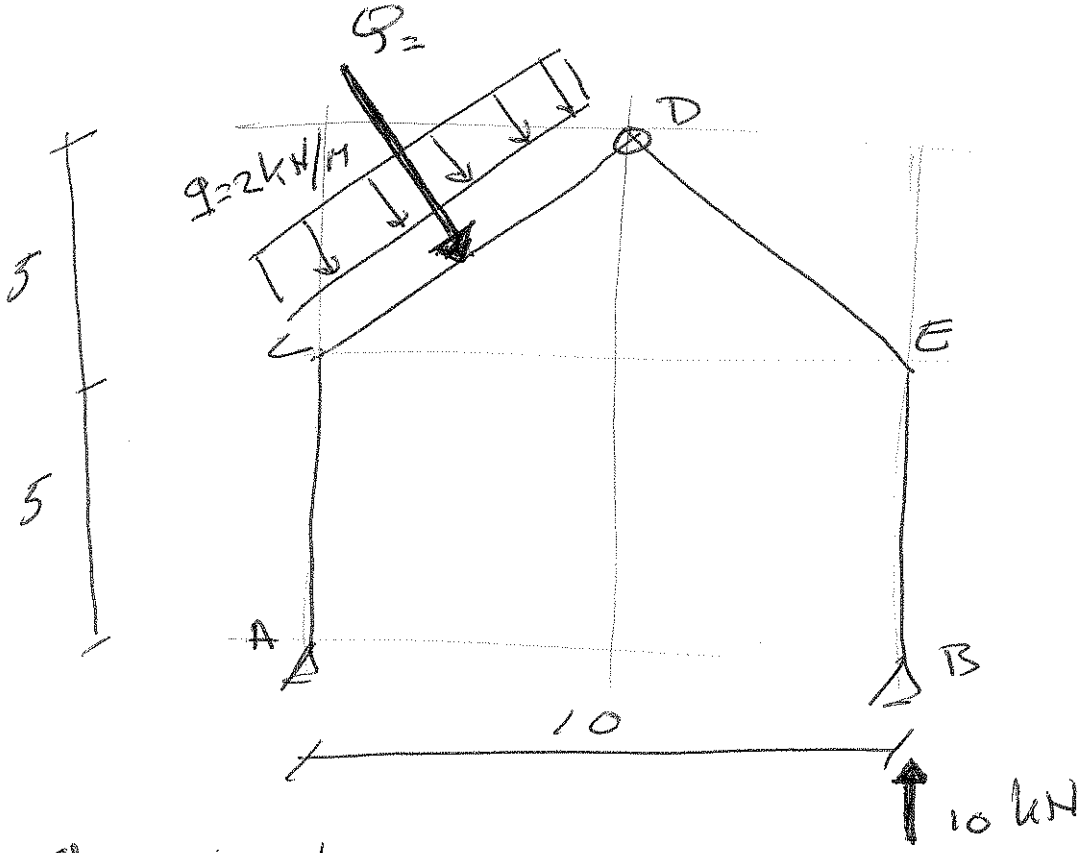


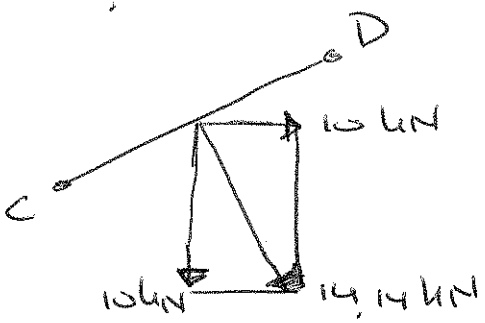


$q = 2\ kN/m$

$CD = 5\sqrt{2}$

$Q = 2 \times 5\sqrt{2} = 14{,}14\ kN$

Ontbinden



ΣM t.o.v. A

$$-10 \times \frac{5}{2} - 10 \times 7{,}5 + 10 F_B = 0$$

$$F_B = \frac{25 + 75}{10} = 10\ kN$$

$\Sigma V = 0$

$$Q - F_B = 10 - 10 = 0$$

$$F_A = 0\ kN$$

ΣM t.o.v. D

$-F_{Ah} \times 5 + 10 \times 2\frac{1}{2} + 10 \times 2\frac{1}{2} + 10 F_{Ah} = 0$

$-0 \times 5 + 25 + 25 + 10 F_{Ah} = 0$

$50 = -10 F_{Ah}$ (Tekenverandering!! Kracht verkeerd om aangenomen)

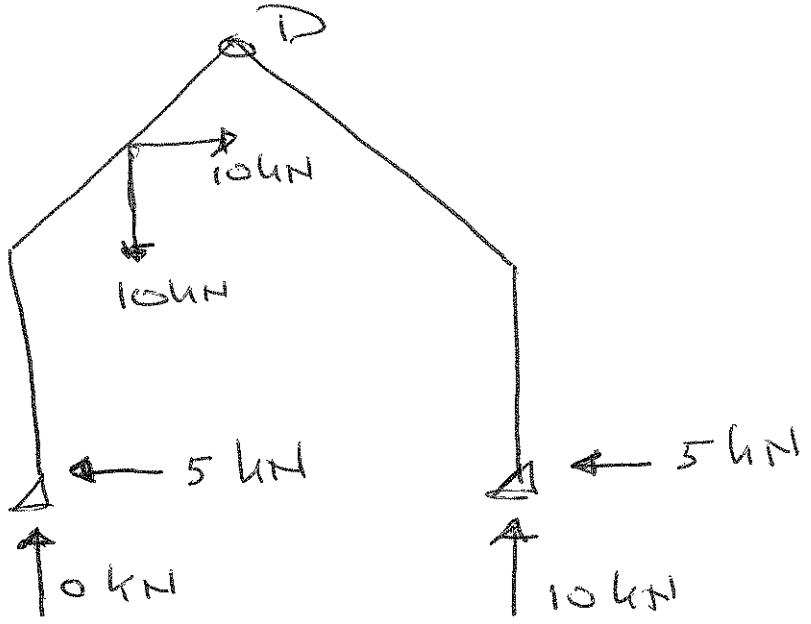
$-F_{Ah} = \frac{50}{10} = 5$ kN ←

$\Sigma H = 0$

$\varphi_{hor} - F_{Ah} - F_{Bh} = 0$

$10 - 5 = F_{Bh}$

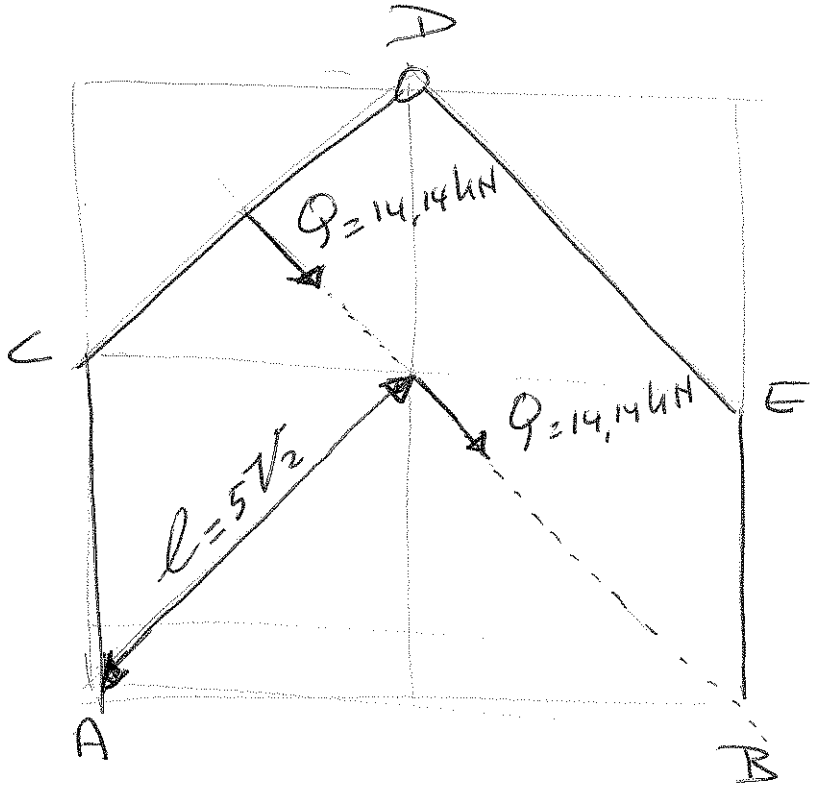
$F_{Bh} = 5$ kN ←



D_v = scharnierkracht $= -10$ kN ↑

$D_{zv} =$ " " $= 10$ kN ↓

Of



$Q = 2 \times 5\sqrt{2} = 14{,}14$ kN

Loodrechte afstand tov A = $l = 5\sqrt{2}$ m

ΣM tov A

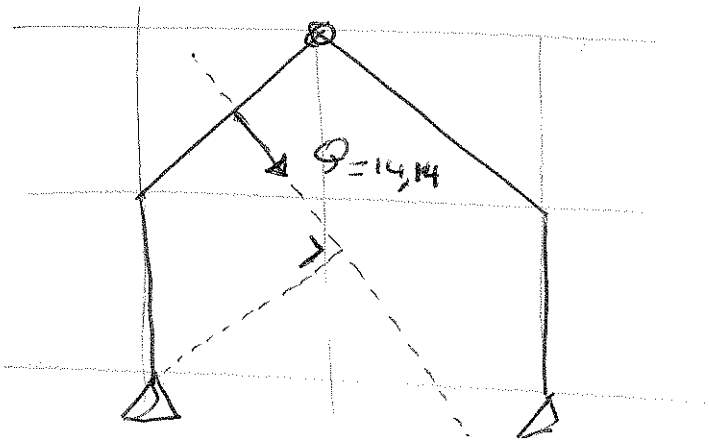
$-14{,}14 \times 5\sqrt{2} + 10 F_B = 0$

$F_B = {}^{100}/_{10} = 10$ kN

ΣM tov B

$-14{,}14 \times 0 + 10 F_A = 0$

$F_A = \frac{14{,}14 \times 0}{10} = 0$ kN



$Q = 2 \times 5\sqrt{2} = 14{,}14$ kN

ΣM t.o.v. D (links)

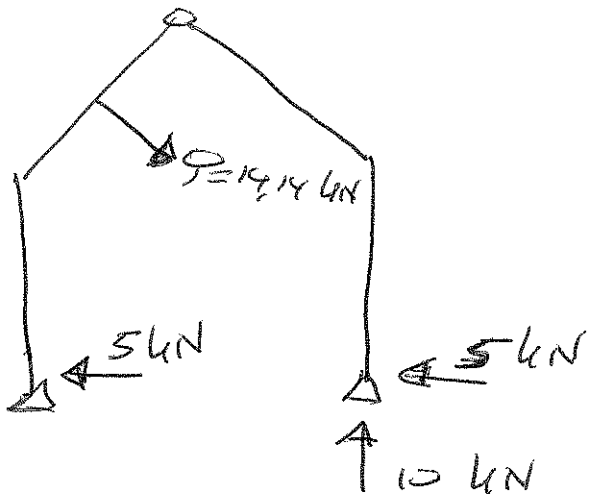
$-10 F_{AH} - 14{,}14 \times \frac{5\sqrt{2}}{2} = 0$

$-F_{AH} = 5$ kN (Tekenverandering! Kracht verkeerd aangenomen ←)

ΣM t.o.v. D (rechts)

$-F_{Bh} \times 10 + F_B \times 5 = 0$

$F_{Bh} = \frac{10 \times 5}{10} = 5$ kN. ←



etc.