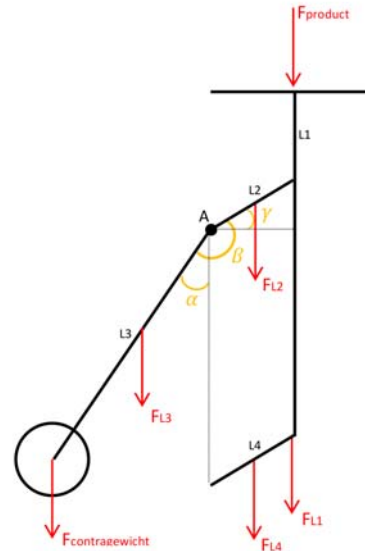


Weegschaal (circa 200mm) maximaal laadvermogen 500gram



variables

$$\beta := 135 \text{ deg}$$

$$\alpha := \beta - 90 \text{ deg}$$

$$F_{con} := 1.8 \text{ N}$$

$$F_{L1} := 18.33 \text{ gm}$$

$$F_{L2} := 5 \text{ gm}$$

$$F_{L3} := 15 \text{ gm}$$

$$F_{L4} := 5 \text{ gm}$$

$$L_1 := 55 \text{ mm}$$

$$L_2 := 15 \text{ mm}$$

$$L_3 := 45 \text{ mm}$$

$$L_4 := 15 \text{ mm}$$

equation

$$F_{pro}(\alpha) := \frac{F_{con} \cdot L_3 \cdot \sin(\alpha) + 0.5 \cdot F_{L3} \cdot \sin(\alpha) - F_{L1} \cdot L_2 \cdot \cos(\alpha) - 0.5 \cdot (F_{L2} + F_{L4}) \cdot L_2 \cdot \cos(\alpha)}{L_2 \cdot \cos(\alpha)}$$

calculations

$F_{pro} := 0 \text{ gm}, 20 \text{ gm} \dots 500 \text{ gm}$

- 0
- 20
- 40
- 60
- 80
- 100
- 120
- 140
- 160
- 180
- 200
- 220
- 240
- 260
- 280
- ...

$F_{pro} =$ **gm** $F_{pro}(\alpha) = ?$

320
340
360
380
400
420
440
460
480
500