

Servo 2

Servo 3

Servo 5

16.5
away from the box

16

14

distance

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1

8 $14 + 4.5 = 18.5$ distance between servo 4 and the box

9 Torque needed $= 18.5 \times 8.829 =$

10 163.3365 servo 4

11

12 For base servo

1 $16.5 + 16 + 14 = 46.5$ cm

2 Torque needed $= 46.5 \times 8.829 =$

3 410.5485 N-cm servo 1

May

5 Shâaban 1437 Hijri

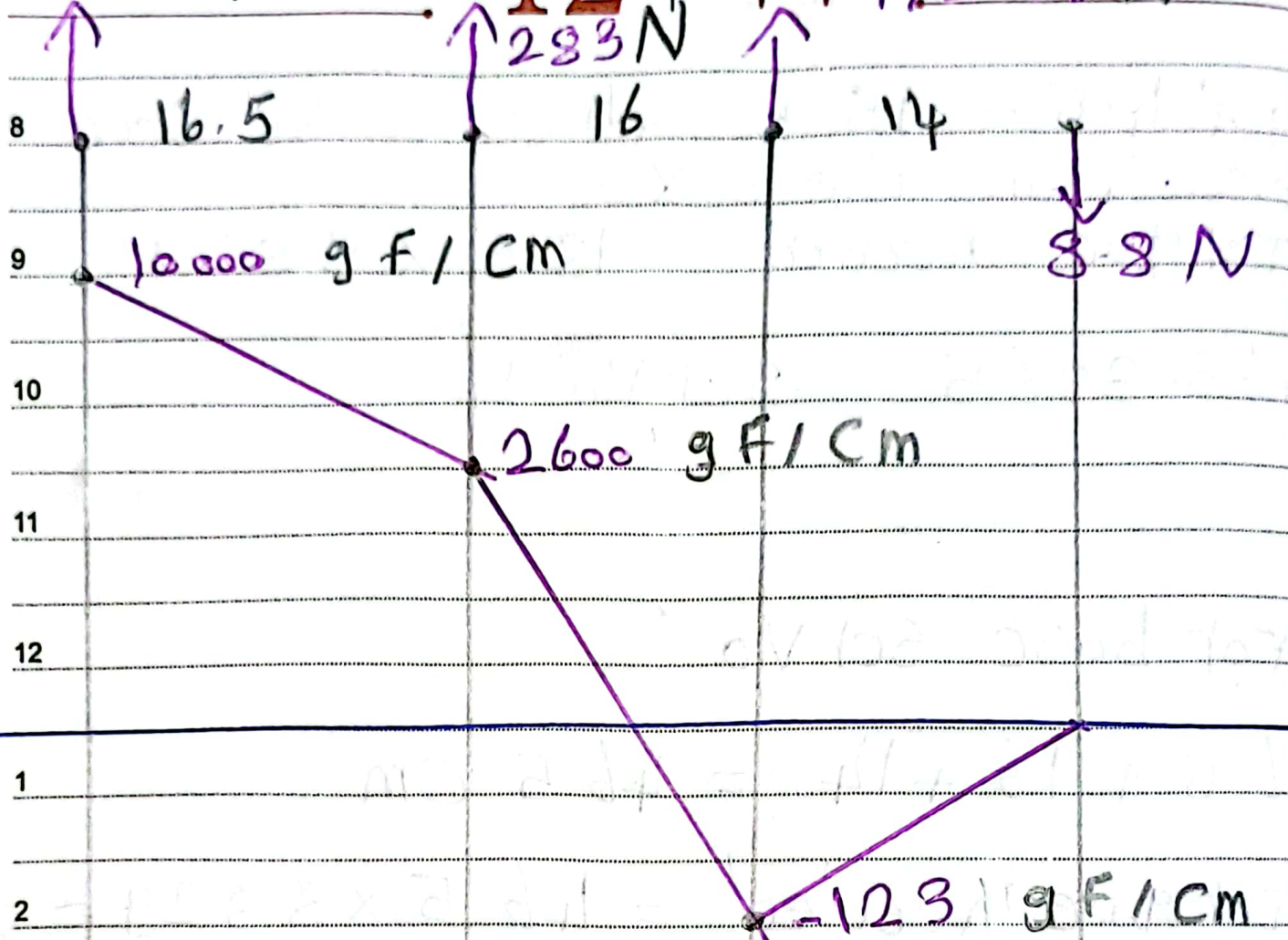
182.79 N

12

17

178.57 N

عبدان ١٧٧



So our robot max weight To be
Carried is equal 178.57 gram
determined by Servo 5 where

Max weight it can carry =

Torque provided

$$\frac{2.5 \text{ Kg} \cdot \text{cm}}{14 \text{ cm}} = 178.57$$

length of
gripper