

د/ محمود العراب

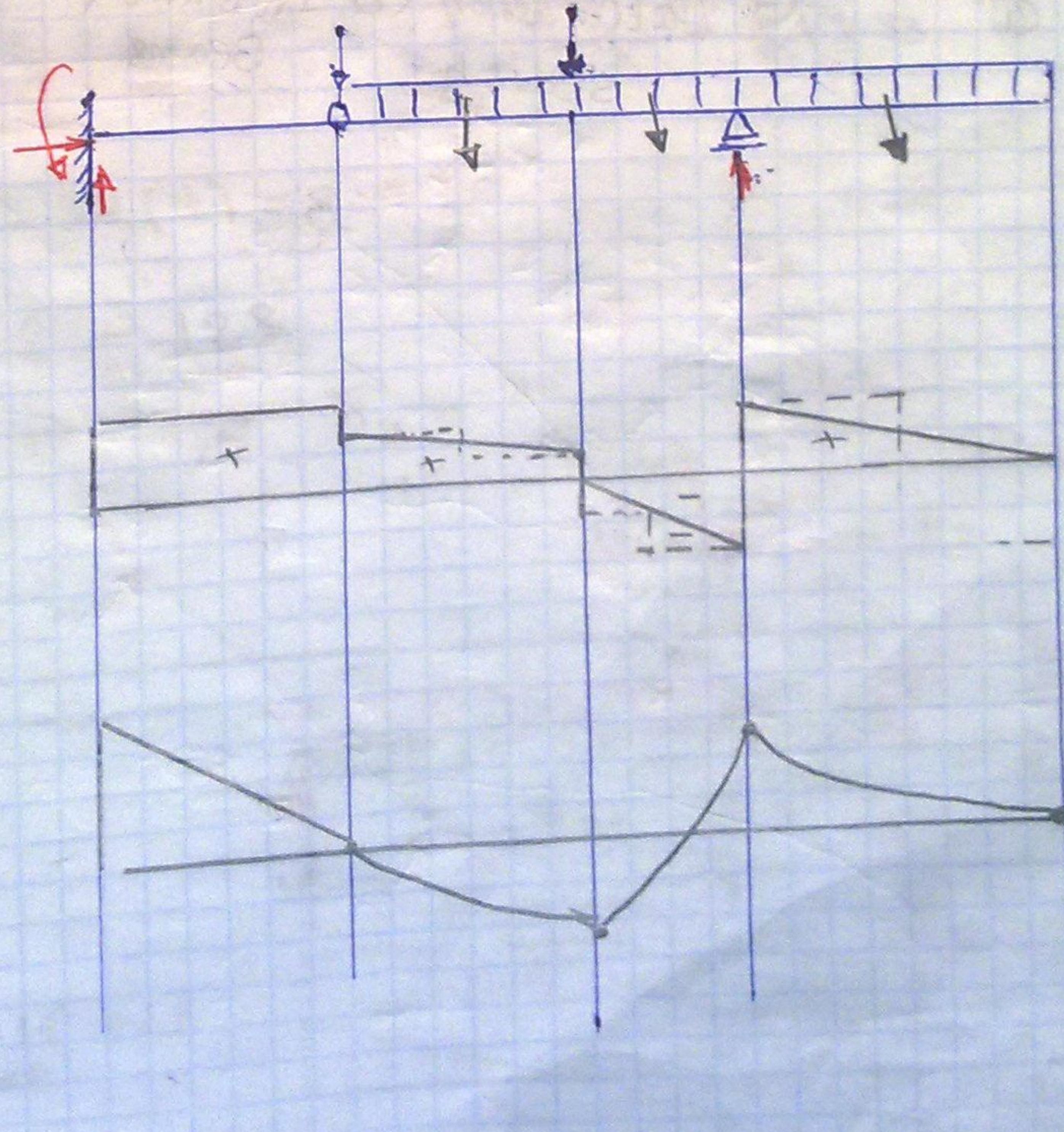
4 / 11 / 2012

(12)

مسألة اقضائية

S

M

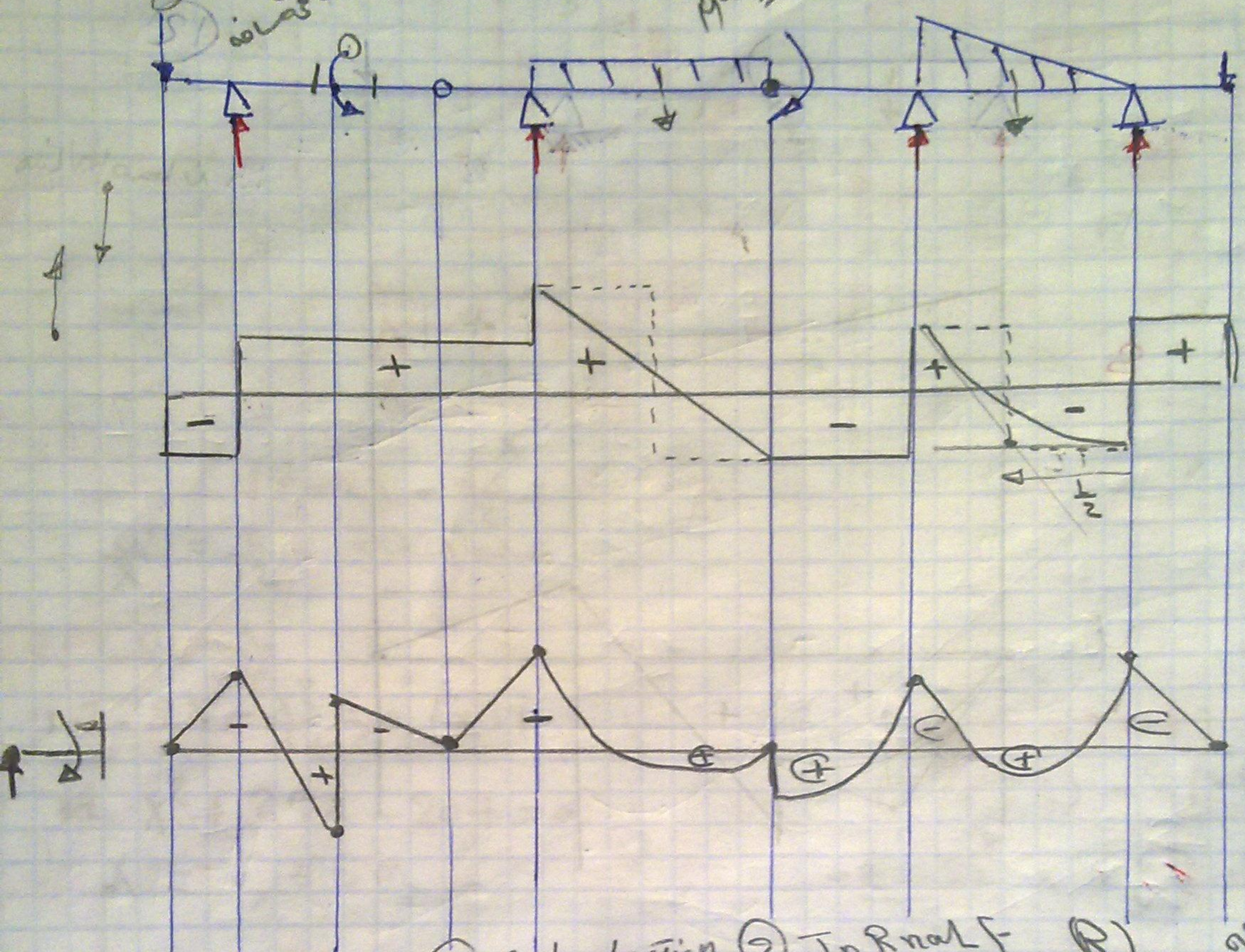




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افقانه  
موتور

$M_{max} = 0$



5

4

3 Calculation sketch

2 Internal Beams

R

at two



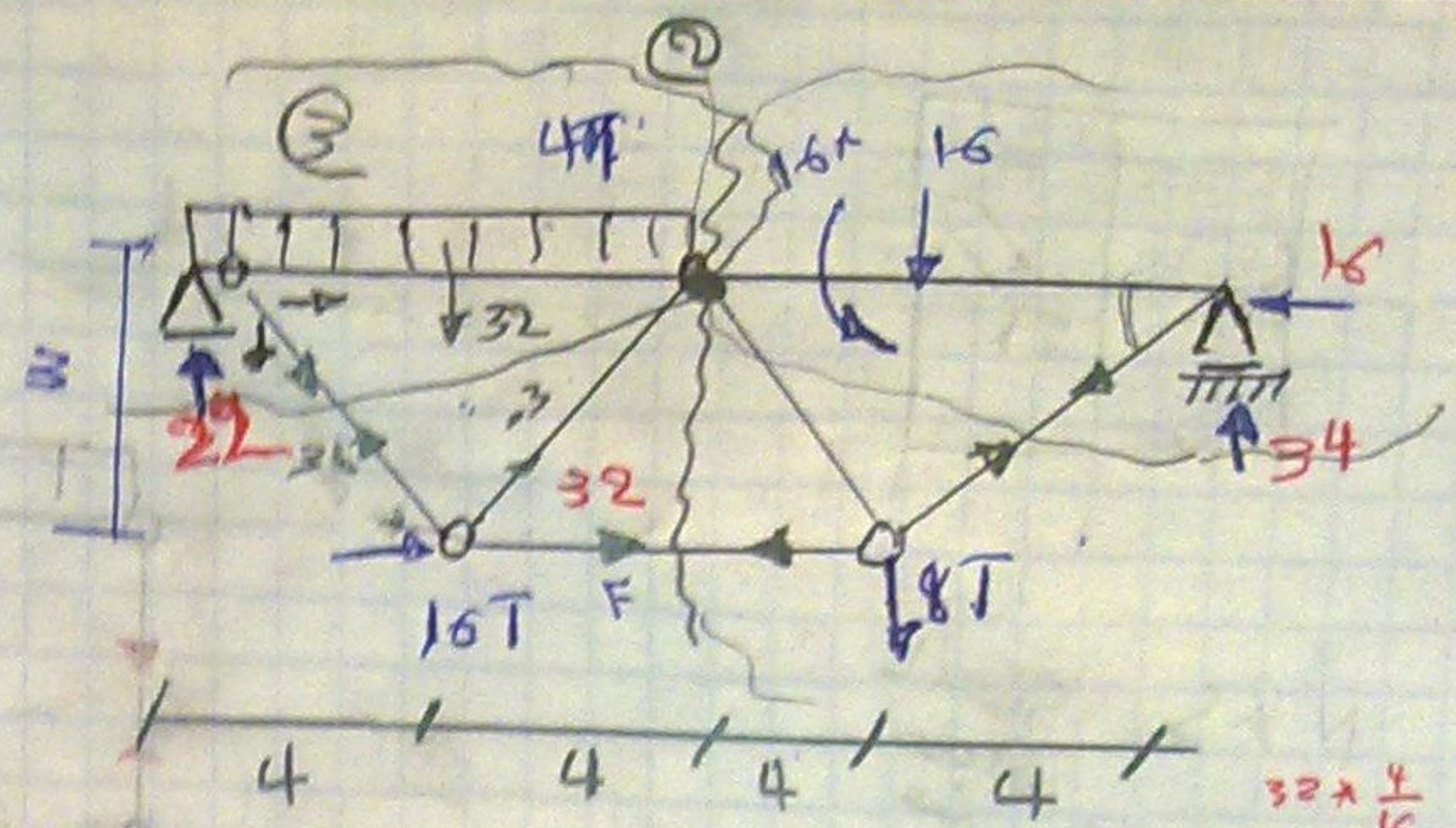
# Curved beams Beams with

## Link members

N) H.R.H.S

$$3F + 24(3) - 22(8) - 16$$

$$F = 32$$



$\sum M_{H_2 R.H.S}$

$$22(8) - F_1 \sin(8) - 16(4) + 16 = 0$$

$$F_1 \sin(8) = 176 - 64 + 16 \Rightarrow 128 \Rightarrow F_1 = 26.67$$

$\sum Y = 0$

$$F_2 \sin + 26.67 \sin - 8 = 0$$

$$\frac{3}{5} F_2 + \frac{80}{3} \times \frac{3}{5} - 8 = 0 \Rightarrow F_2 = -\frac{8(5)}{3} = 13.33$$

②  $\sum M_{H.R.H.S}$   
 $34(8) - F_3 \sin(8) - 32(4) = 0$

$$\frac{3}{5}(8) F_3 = 272 - 128$$

$$4.8 F_3 = 144 \Rightarrow F_3 = 30$$

$\sum Y = 0$

$$F_4 = -30$$

اعكس الاشارة على حسب القيمة

$$30 \times \frac{3}{5} =$$

$$30 \times \frac{4}{5} = \text{check}$$

$$\sum Y \quad 32 + 16 + 16 + 18 = 82$$

$$\sum X =$$

