

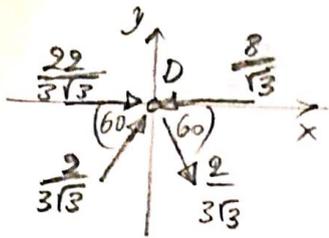




Katibos D (Edepxos)

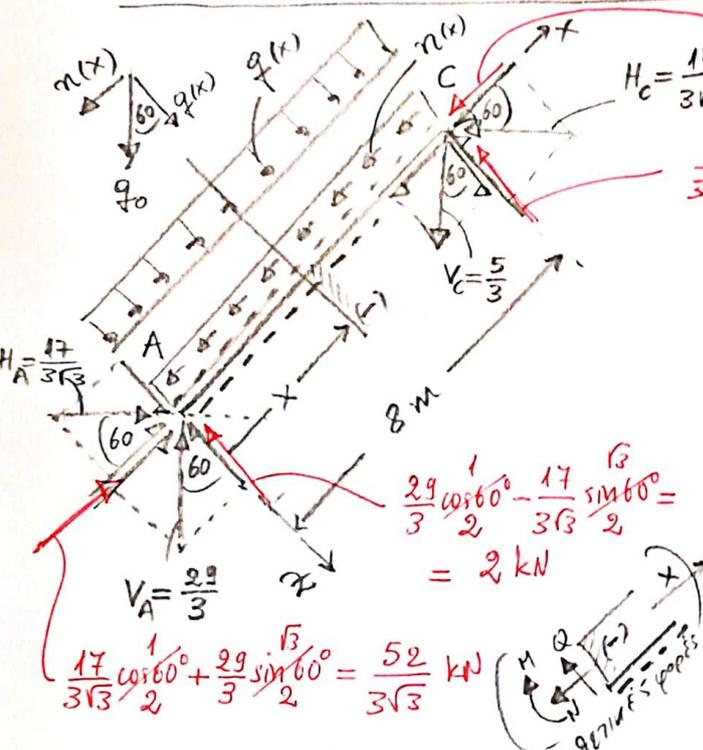
(29.5)

Partos	Avatlu	Eidos
CE	$10/2\sqrt{3}$	Ey
CD	$22/3\sqrt{3}$	G2
BF	$14/2\sqrt{3}$	Ey
BD	$2/\sqrt{3}$	O2
ED	$2/2\sqrt{3}$	O2
EF	$2/\sqrt{3}$	Ey
DF	$2/3\sqrt{3}$	Ey



$\sum F_y = 0 \checkmark$   
 $\sum F_x = \frac{22}{3\sqrt{3}} + \frac{2}{3\sqrt{3}} \cos 60^\circ \cdot 9 = \frac{2}{\sqrt{3}} \checkmark$

N, Q, M, omv katibosias Dors AC



$H_C = \frac{17}{3\sqrt{3}}$   
 $\frac{17}{3\sqrt{3}} \cos 60^\circ + \frac{5}{3} \sin 60^\circ = \frac{16}{3\sqrt{3}} \text{ kN}$   
 $\frac{17}{3\sqrt{3}} \sin 60^\circ - \frac{5}{3} \cos 60^\circ = 2 \text{ kN}$

$n(x) = q \sin 60^\circ = 1 \cdot \frac{\sqrt{3}}{2} \frac{\text{kN}}{\text{m}}$  (vari x = cras)  
 $q(x) = q \cos 60^\circ = 1 \cdot \frac{1}{2} \frac{\text{kN}}{\text{m}}$  (vari x = cras)

Agnivies N (0 ≤ x ≤ 8)

$N(x) = -\frac{52}{3\sqrt{3}} + n(x) \cdot x = -\frac{52}{3\sqrt{3}} + \frac{\sqrt{3}}{2} x \text{ kN}$ , seath.  
 $N(0) = -\frac{52}{3\sqrt{3}} \text{ kN}$ ,  $N(8) = -\frac{52}{3\sqrt{3}} + \frac{\sqrt{3}}{2} \cdot 8 = -\frac{16}{3\sqrt{3}} \checkmark$

Tefnivos Q (0 ≤ x ≤ 8)

$Q(x) = 2 - q(x) \cdot x = 2 - \frac{x}{2} \text{ kN}$ , seath.  
 $Q(0) = 2 \text{ kN}$ ,  $Q(8) = 2 - \frac{8}{2} = -2 \text{ kN} \checkmark$

Povtis katibos M (0 ≤ x ≤ 8)

$M(x) = 2 \cdot x - \frac{q(x) \cdot x^2}{2} = 2x - \frac{x^2}{4} \text{ kNm}$ , parabolikos  
 $M(0) = 0 \text{ kNm}$ ,  $M(8) = 16 - 16 = 0 \text{ kNm} \checkmark$   
 $M'(0) = Q(0) = 2 \text{ kN}$  wsim,  $M'(8) = Q(8) = -2 \text{ kN}$  wsim  
 $M''(x) = -q(x) = -\frac{1}{2} \frac{\text{kN}}{\text{m}}$  apovvies kat' avd' avtuz  
 $M_{\text{max}} = M(4) = 8 - 4 = 4 \text{ kNm}$   
 (omvavio p' avt' avtuz Q(x))

