EOP1 - MCR - 3B - 2302

$F_{Rx} = +\rightarrow \sum F_x = 50\left(\frac{4}{5}\right) = 40\ N$

25 %

⑥ $F_{Ry} = +\uparrow \sum F_y = -40 - 30 - 50\left(\frac{3}{5}\right) = -100\ N$ ∴ $\vec{F}_R = (40\,\hat{i} - 100\,\hat{j})\ N$

$(\bar{M}_R)_A = \sum M_A + \sum M = \bar{M}_A^{F30} + \bar{M}_A^{F50} + \bar{M} = -30(3) - 50\left(\frac{3}{5}\right)(6) - 200 = -470\ N\cdot m$

∴ $(M_R)_A = 470\ N\cdot m$

5:30

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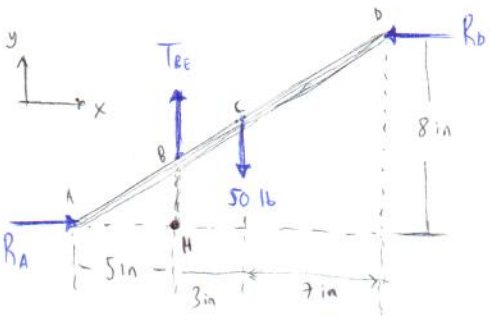
②

35 %



- Ecuaciones de equilibrio:

$+\rightarrow \sum F_x = 0 \rightarrow R_A - R_D = 0$ ... (i)

$+\uparrow \sum F_y = 0 \rightarrow T_{BE} - 50 = 0$ ... (ii)

$+\circlearrowleft \sum M_H = 0 \rightarrow -50(3) + R_D(8) = 0$ ... (iii)

De (ii) → $T_{BE} = 50\ lb$

De (iii) → $R_D = \frac{50(3)}{8} = 18.75\ lb$ → $R_D = 18.75\ lb$

∴ De (i) → $R_A = 18.75\ lb$

7:50

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① F_R - 10 %
$(M_R)_A$ - 15 %

② DCL OK - 10 %
Cada Reacción → 8 %

③