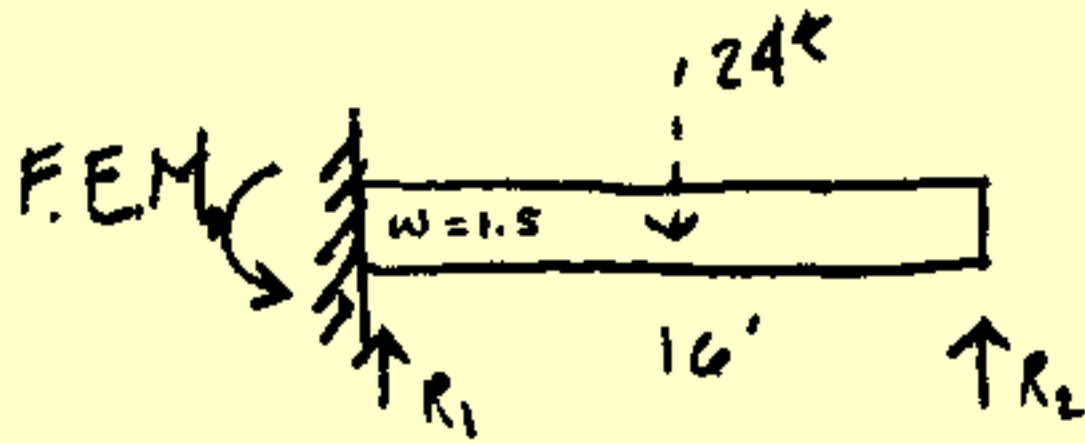


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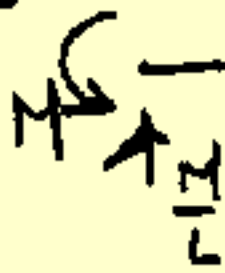
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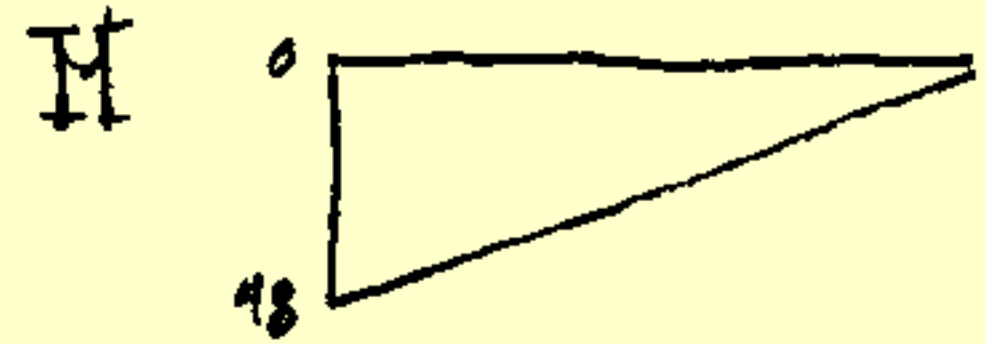
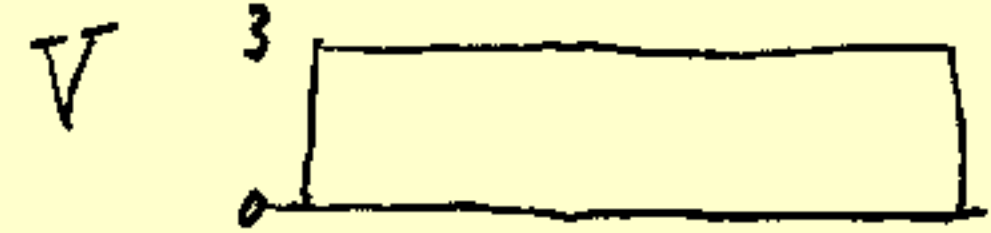
WEIGHTLESS STICK

$$\theta_1 = \frac{ML}{3}$$

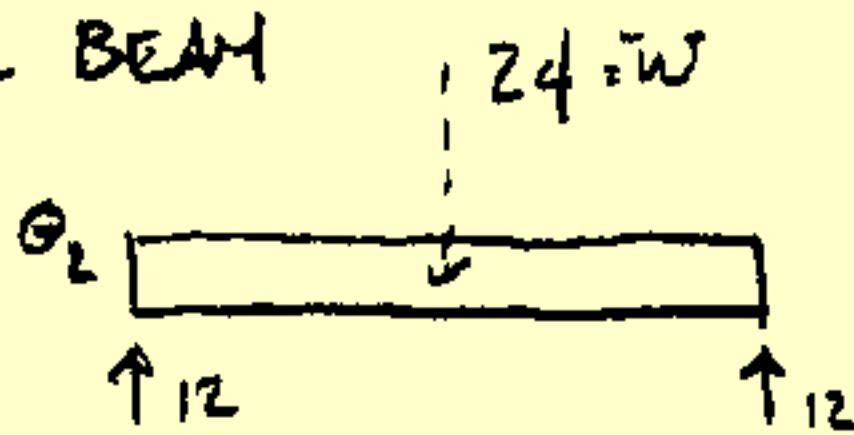


$$\theta = \frac{ML}{6}$$

$$\frac{M}{L} = \frac{48}{16} = 3$$



SIMPLE BEAM



$$\theta_2 = \frac{wL^2}{24} = \frac{24(16)^2}{24} = 256$$

EQUATE θ 's

$$\theta_1 + \theta_2 = 0 = \frac{ML}{3} + 256 = M(5.33) + 256$$

$$M = 48 \text{ k-ft}$$

