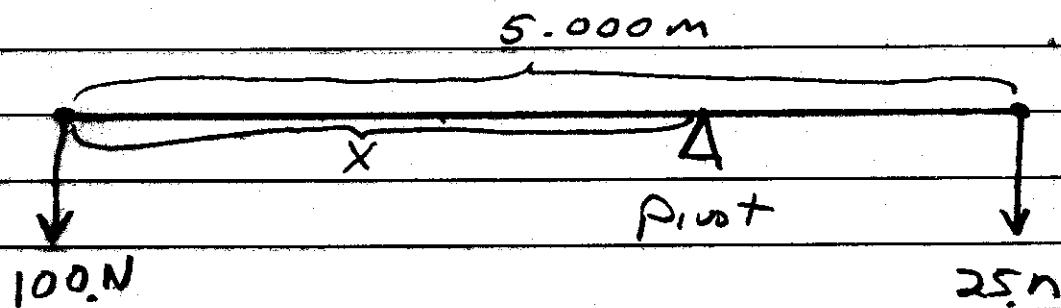


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Find  $x$  for equilibrium



Solution:

For equilibrium  $\Sigma T = 0$

The 100 N force causes a ccw torque

" 25 N force " " cw torque

$$T_{ccw} = T_{cw}$$

$$(100\text{N})(x) = (25\text{N})(5\text{m} - x)$$

$$100x = 125\text{m} - 25x$$

$$100x + 25x = 125\text{m}$$

$$125x = 125\text{m}$$

$$x = \frac{125\text{m}}{125} = 1\text{m}$$

$$x = 1.00\text{m}$$