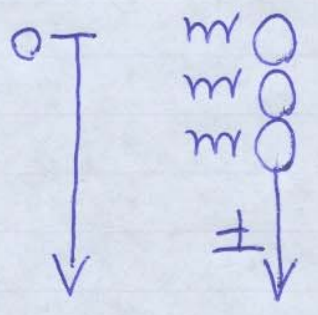


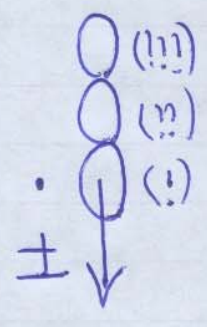
Problem 15 (Assessed):



A: acceleration of the chain

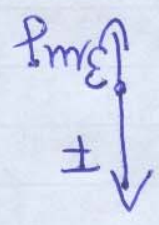
$$(3m) a = \pm - 3mg$$

$$\Rightarrow a = \frac{\pm}{3m} - g$$



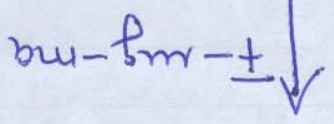
B:

(i)

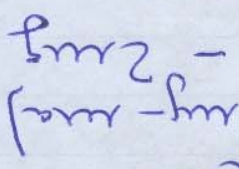


$$\Rightarrow 3ma = \pm - 3mg$$

(ii)



$$\Rightarrow 2ma =$$



and also

$$\pm - mg - ma = \pm - mg - m \left(\frac{3m}{\pm} g \right)$$

$$= \pm - mg - \frac{3}{\pm} + mg = \frac{\pm}{3}$$