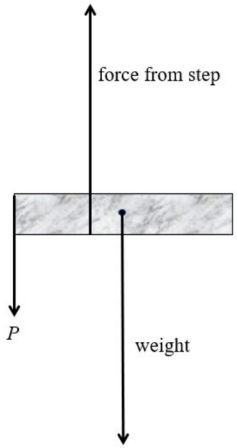
Question Number	Answer		Mark
13(a)(i)	Zero resultant/net force (in any direction) Zero (turning) moment (about any point)	**(1)** **(1)**	**2**
13(a)(ii)	The point through/at which the weight of the object may be taken to act	**(1)**	**1**
13(b)(i)	Downward arrow at centre of gravity labelled "weight" **Or** "W" **Or** "mg" Upward arrow between CoG. and P labelled "force from step"  	**(1)** **(1)**	**2**
13(b)(ii)	Use of moment of a force = $F\,x$ Applies principle of moments $P = 52$ N Example of calculation Taking moments about the right hand edge of the step: $0.40\text{ m} \times P = 0.05\text{ m} \times 4.15 \times 10^2\text{ N} = 20.8\text{ N m}$ $P = 20.8\text{ N m} \div 0.40\text{ m} = 51.9\text{ N}$	**(1)** **(1)** **(1)**	**3**
	Total for question 13		**8**