

Moments and Levers

The turning effect of a force is called a “moment”.

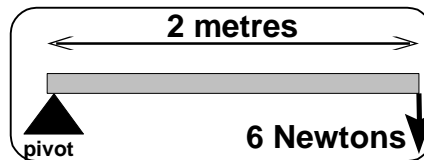
You may have heard of “leverage” or “torque” – they’re the same thing.

We work it out using **Moment = Force x Distance**.

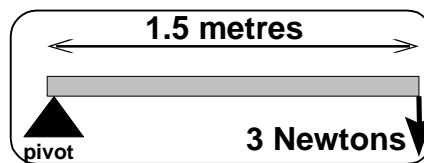
The force must be in Newtons (N), the distance in metres (m), and we measure moments in “Newton Metres”(Nm)

Answer these :-

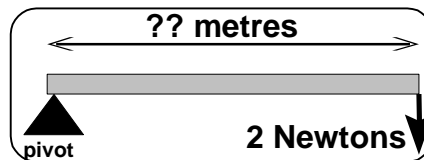
1. What is the moment of this force ?



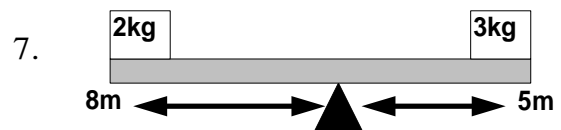
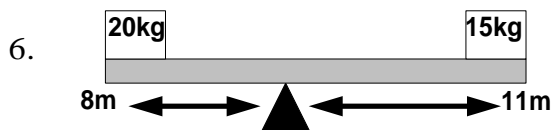
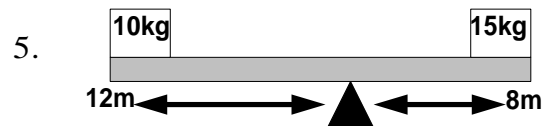
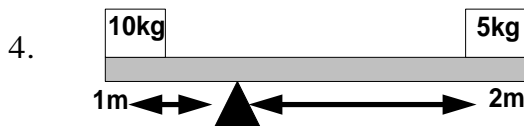
2. What is the moment of this force?



3. What is the length of this lever if the **moment is 8 Nm** ?



For a see-saw to balance, the **moments on each side** must be the same. For each of these, write “**balanced**” or “**unbalanced**” :



All of these see-saws are balanced. Work out the missing number for each one.

