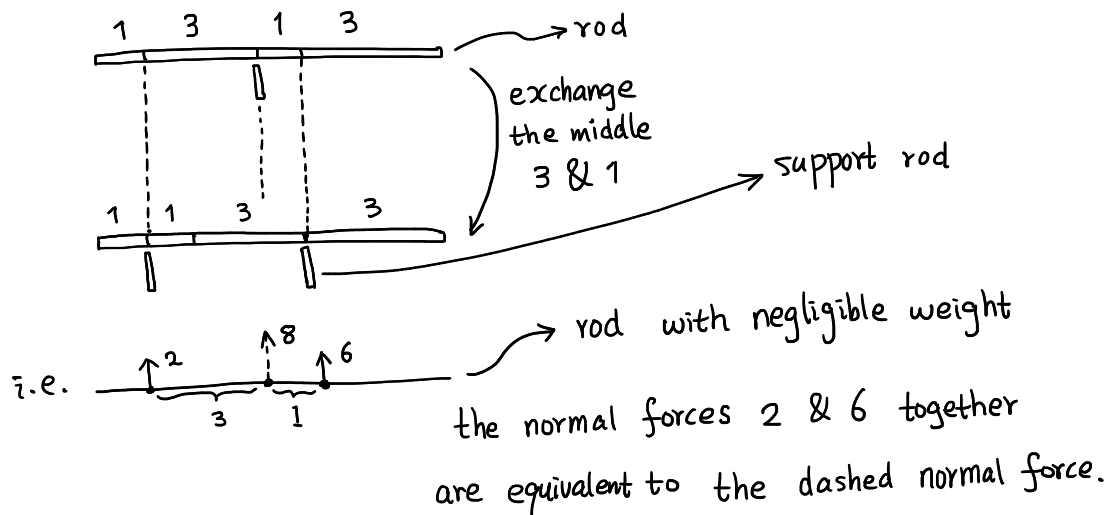


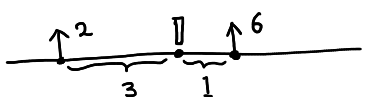
Law of lever — why it works

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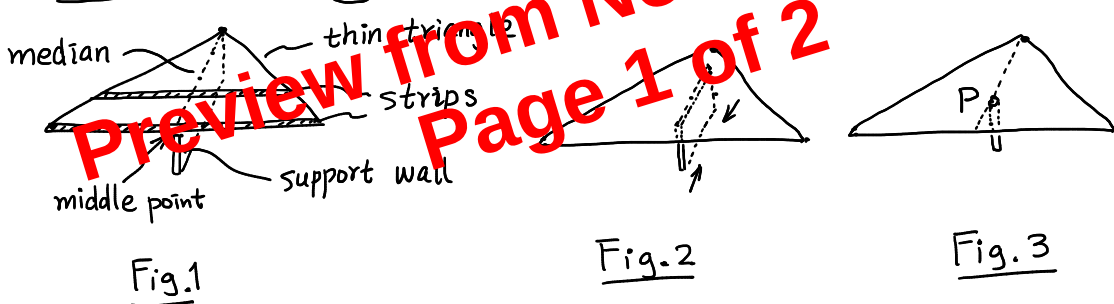
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1. Law of lever: observe a balanced rod in two cases.



thus  must be balanced.

2. Centroid of an arbitrary triangle.



A very thin triangle could be balanced by a support wall on the median (Fig. 1), since every narrow strip is so.

Carefully shrink the length of the support wall (Fig. 2), such that the triangle is kept balanced during this process.

Shrink the support wall further and further, finally, the triangle will be balanced by a slim rod supporting at some point P on the median (Fig. 3).

That is, the center of weight (the point P) of this homogeneous triangle (called centroid) must be on this median.