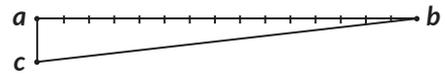
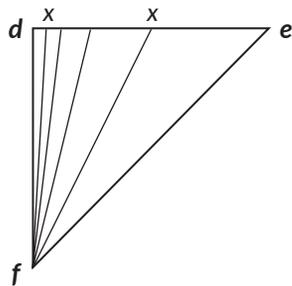


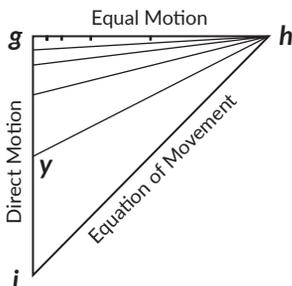
When the speed of the cloud that sows the hail is equal to the speed of descent of the hail, then the length of their motions will be equal.



If the hail descended a mile, and the cloud from which it descended moved 16 times, you can be sure that the cloud travels 16 times faster than the hail.



The line of the cloud and the hail left by it can never be on the line of equality, because even if the cloud made its motion very fast in separating itself from the hail, this hail, even if it was very slow, at the time they begin their motions it is necessary that for no instant the motion stops at any point. Therefore, being the cloud in *c*, the hail can never remain in *a*.



Middle Figure

Here the rule is made and practice with experience, since you have to drop from *g* to *i* a ball of such height that it takes a harmonic time to descend freely.

When the hail that fell from *d* is found in *f* the cloud from which it descended is found in *x* then it is clear that the hail was twice as fast as the cloud; and so these degrees of speed are measured up the line *de*.

Then measure as many lines in *gh* as that of the descending note *gi*, and knowing this, you know when the cloud rolls as much as the descending of the hail, that the line of many grains of hail will be *ih*.

Bottom Figure

But if you then see these grains for the line *h*, you are clear that the cloud has double speed to the speed of said hail.

But if the cloud is in *h* and the hail in *y*, then the speed of the cloud is shown to be double the speed of the hail, and so this speed is measured by the line *gi*.