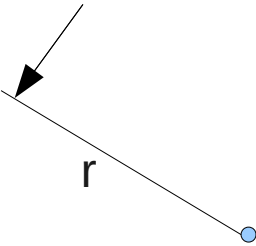
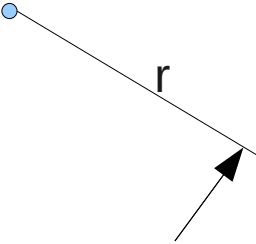


Moment also has a direction...clock and anticlockwise...one should be taken negative, the other positive.

Notice that comparing these 2 scenarios -



and



Although the the forces applied are in radially opposite directions, they produce moment in the same direction. By this we can say that the direction of moment is is not necessarily dependent on the direction of application of force...so the sign of $F \cdot r$ (moment) should be taken after theoretical analysis and should not be left on the sign of force.

So actually moment = $|F|r$; that is product of the modulus of force and perpendicular distance from the fulcrum.

Even while forming equations, this fact should be kept in mind.