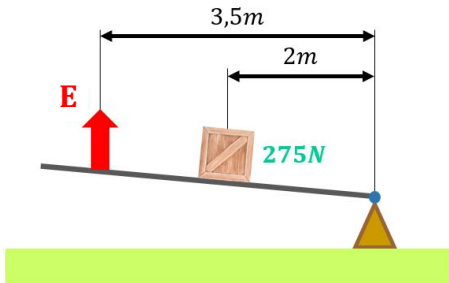
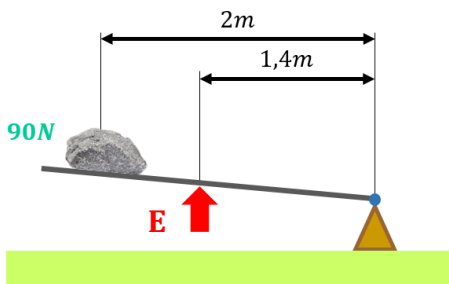


Name: _____ Date: _____

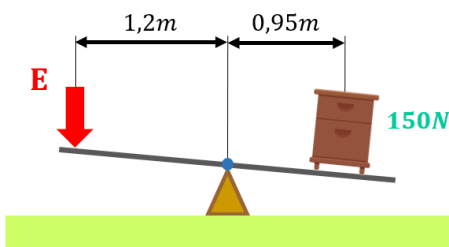
Problem 1: Calculate the force (E) that will have to be exerted on the lever to lift the box. What type of lever is it? **[Solution: 157,14 N]**



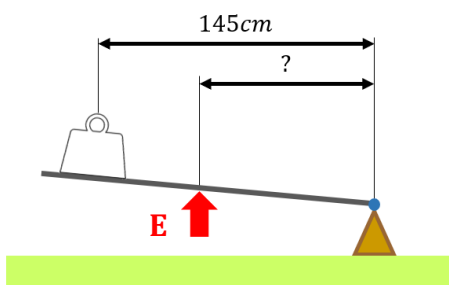
Problem 2: Calculate the force that will have to be exerted on the lever to raise the stone. What type of lever is it? **[Solution: 128,57 N]**



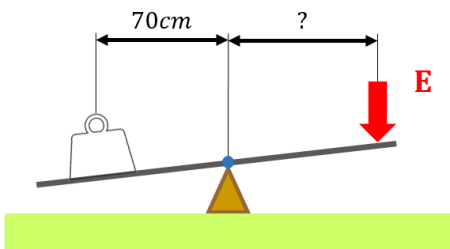
Problem 3: Calculate the force to be exerted on the lever to raise the furniture. What type of lever is it? **[Solution: 118,75 N]**



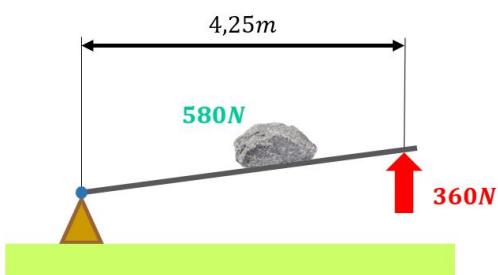
Problem 4: Calculate the length (in meters) of the effort arm must have if the weight to be lifted is 210N and a force of 310N is being exerted. **[Solution: 0,98 m]**



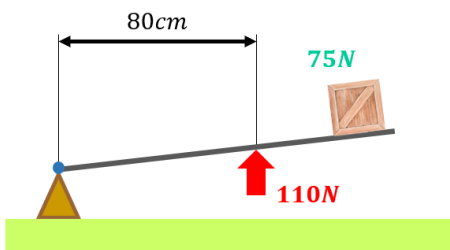
Problem 5: Calculate the length (in meters) that the effort arm must have if the weight to be lifted is 325N and a force of 250N is being exerted. **[Solution: 0,91 m]**



Problem 6: How far from the fulcrum must the stone be placed on the lever in the drawing for it to be balanced? **[Solution: 2,63 m]**



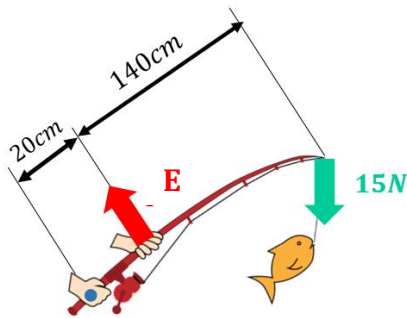
Problem 7: How far from the fulcrum must the box be placed on the lever in the drawing for it to be balanced? **[Solution: 1,17 m]**



Problem 8: Calculate the maximum load that can be transferred on the wheelbarrow in the drawing if the person moving it can exert, at most, a force of 525N. **[Solution: 1837,5 N]**



Problem 9: Calculate the force that a fisherman must exert to lift a fish that weights 15N. **[Solution: 120 N]**



Problem 10: Calculate how far from the fulcrum the counterweight should be placed on the following balance so that it is balanced if:

- A watermelon that weights 48N is placed on the plate.
- The counterweight exerts a force of 12N.

[Solution: 0,6 m]

