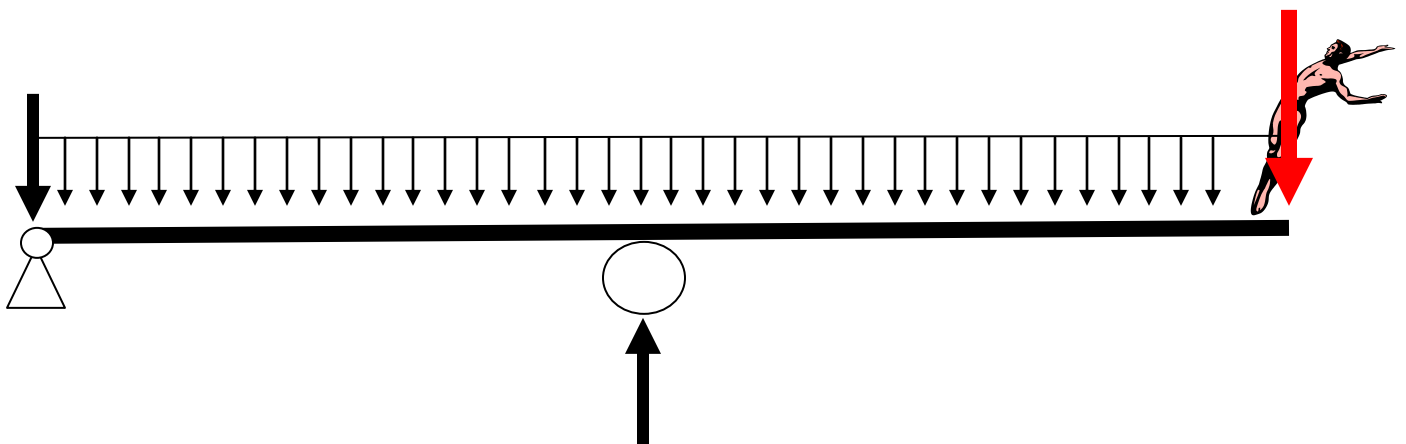


Civil 231 - Photo Contest 1



For a diving board the loads are transmitted through a hinge and a roller to its foundation. The hinge allows the diving board to free move up and down allowing the board to bounce so the diver can reach a maximum height. The roller can be moved back and forward to decrease or increase the stiffness of the board. This allows the diver to adjust the amount of stiffness he needs for his dive. A key factor for the reaction forces on the hinge and roller is where the diver is located on the diving board. This structural system allows a diver to jump higher and perform more tricks in the air.