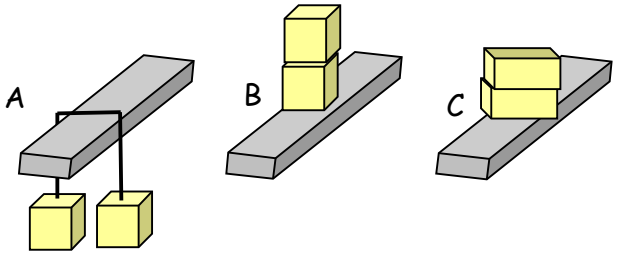
1. State two differences between translational motion and rotational motion.

2. Which is the most stable rotational equilibrium? Which is the least stable? Explain.

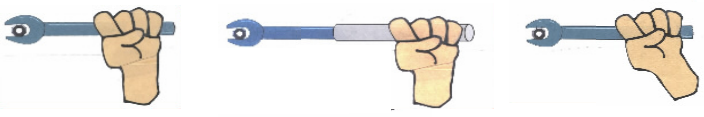


3. Why is it easier to keep your balance on a moving bicycle than on one that is standing still?

4. Why can this boy not touch the floor before toppling over?

5. What is the difference between a force and a torque?

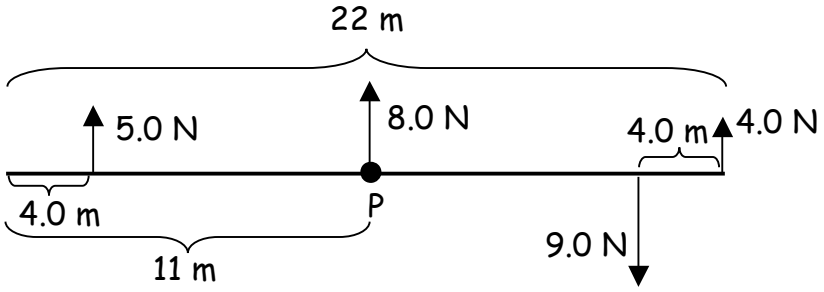
6. If the same force is applied to each wrench handle, which will produce the most torque? Explain. Why is it not a good idea to pull the handle at an angle?



Unit 7 Review Sheet **Name**_____

PROBLEMS:

1. Calculate the net torque:



2. A 2.8 m uniform board weighing 210 N lays flat on the ground. A pet chipmunk sits 0.6 m from the right. The chipmunk is 520 N. What force is needed to lift the board uniformly at the chipmunk's end?

3. High over a construction site, a crane dangles a 2000 N steel beam from its middle. A man standing 2 m from the left side weighs 600 N. If a man weighing 800 N stands on the right side, and the beam is 10 m long, how far must he stand from the right side to balance the beam?