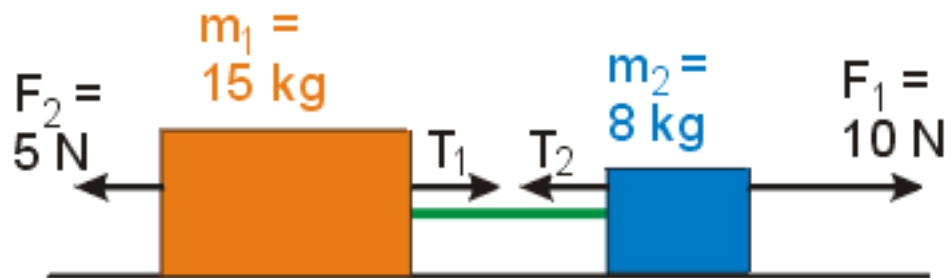# PHY138 - Problem Set #4

This problem set is due by 5PM Monday, October 6 in the "Drop Boxes" in the basement of McLennan.

Non-text Problem

In class we extended Example 4.5. This problem extends it further

In one class extension, we glued the blocks together and had the forces pulling on them instead of pushing. Now we have connected the blocks by a rope. Assume the surface on which the blocks sit has no friction.

The indicated tensions in the rope, T_1 and T_2, are applied to the surfaces of the corresponding blocks.

1. If the rope has no mass, what are the tensions T_1 and T_2?
2. If the rope has a mass of 3 kg, what are the tensions T_1 and T_2?

From the Textbook

- Chapter 4: Problems #8, 10, 18, 25
- Chapter 5: Problem #12