Homework 14.

The problems below are not that simple as they look like. Please think them over thoroughly and make detailed pictures. Again, start the solution of the problem from the question. For example if you asked to find the work, first you have to refresh in your mind the definition for work.

- 1. A load of mass m initially at rest is being pulled up. The load starts moving up with a constant acceleration and passes distance h during time period t. Try to get the formula for the work done by the pulling force assuming that m, h and t are known.
- 2. A brick m is being pulled by another brick M as it is shown in Figure below. The surface is frictionless, the thread is weightless. Find formula for acceleration of the brick m, assuming that m and M are known.

