# Problem Statement
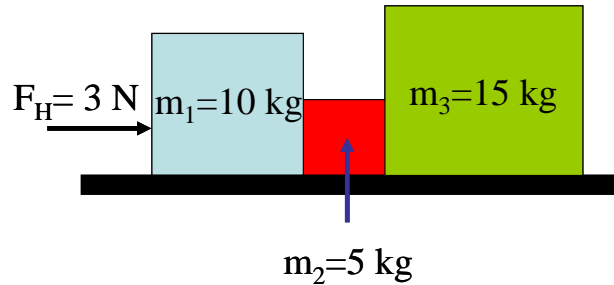
Three blocks ($m_1$=10 kg, $m_2$=5 kg, $m_3$=15 kg) are in contact on a frictionless horizontal table (block with mass $m_2$ is in the middle). A constant horizontal force of magnitude $F_H$=3 N is applied to block with mass $m_1$. Find the forces exerted on $m_1$ by $m_2$ and on $m_2$ by $m_3$.



$F_H$= 3 N   $m_1$=10 kg   $m_3$=15 kg

$m_2$=5 kg

# Qualitative Analysis

- Redraw the picture provided if it helps you in solving the problem.
- Give names to all known and unknown numerical quantities
- Make reasonable physical assumptions
- Try to make predictions about the solution

# Planning/Decision Making

- What physics principle applies here (or principles apply in different parts of the problem if you must divide the problem into sub-problems)?
- Choose the systems that may be helpful in solving for the unknowns (e.g., a single block or all the blocks together etc.).
- Draw a free-body diagram if helpful for each system you chose.

# Implementation

# Assessment and Reflection

- Does the solution have the right dimensions?
- Does the solution agree with your qualitative assessment?