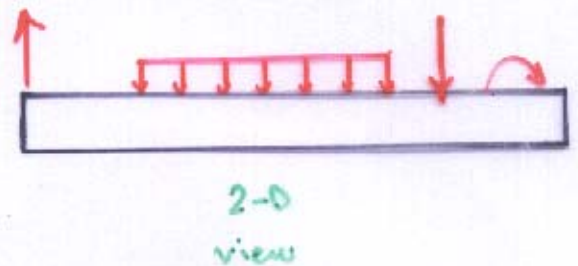
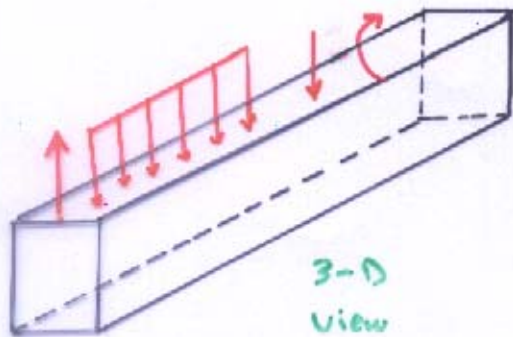
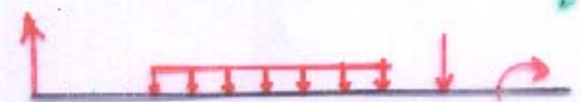


Bending of Beams

Beam = a structural member long in one direction relative to the other two, and loads are in the transverse direction (loads \perp to the long direction [Beam axis]).



Beams are usually drawn as lines only (not as above) as shown below:



* Beams are usually straight.

* Loads:

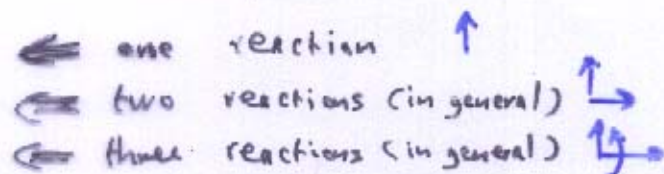
Concentrated
Distributed
Moment (of a couple)



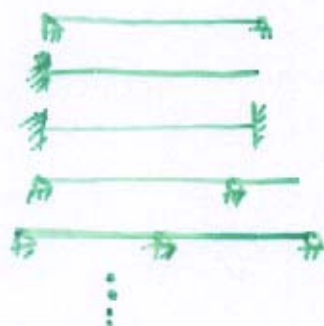
* Supports:



roller
hinge
fixed



* Names (Types):



Simply-supported
cantilever
fixed-fixed
overhang
continuous

* Internal forces:

M = bending moment (covered now)
V = shear force (will be covered later)
N = normal force (already covered \Rightarrow ignore now!)

