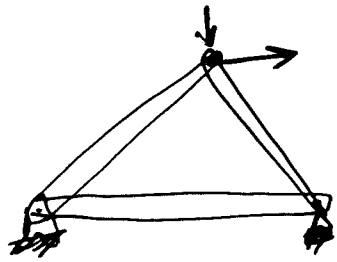
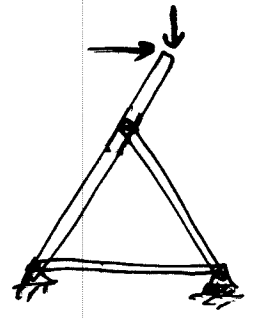
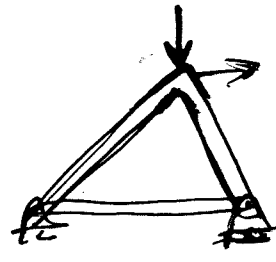
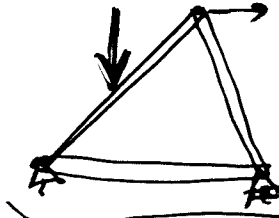


Frames & Machines

Frames and machines are multi-force members (not two-force members as trusses).



truss



frames
(not be trusses, Why?)

The internal forces in frames (at the joints.... etc) are as discussed before at the beginning of the chapter.

The way of the analysis for frames and machines is the same.

* Frames are usually ^{stationary} rigid, i.e., they do not move from their places. They are used to support loads.

* Machines are usually nonrigid. They are designed to transmit and modify/alter forces. The examples next will illustrate this.

In each part / FBD, there are usually 3 eqs. (2-D R.B. : $\sum F_x = 0$, $\sum F_y = 0$; $\sum M = 0$) and possibly 3 unknowns.

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* FBD with all forces, not more, not less!!