

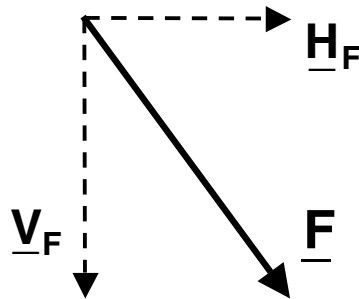
UNIFIED HANDOUT

MATERIALS AND STRUCTURES - #M-1

Fall, 2008

Hints in drawing Free Body Diagrams

- Draw an axis system.
- Align system with structure or natural loading direction(s).
- Show important dimensions.
- Show support reactions in positive orthogonal coordinates.
- Use “squiggle” (~) through line to indicate reaction.
- Label *everything* of importance.
- Use solid lines for vectors (i.e. forces), dashed lines for their components.



- Assume unknown forces (especially internal) are in tension. If they turn out *negative* (-), then they are in compression. Keep sense you start with to avoid confusion:

(+) tension
(-) compression

- **BE NEAT!!!!!!!!!!!!**