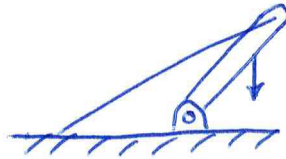
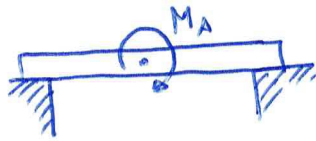


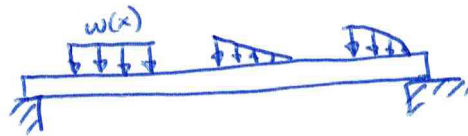
moments review



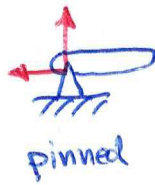
applied moments



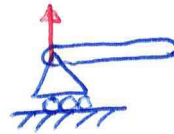
uniform / non-uniform loads



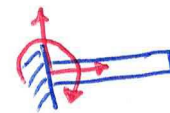
connection types



pinned

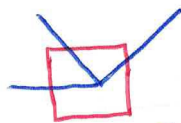


roller

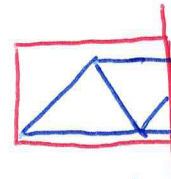


fixed

analysis methods:

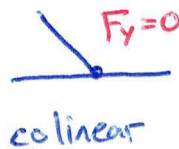


method of joints

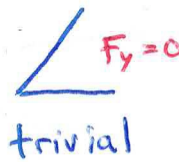


method of sections

zero force members



collinear



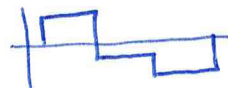
trivial

truss types: King, Queen, Fink, Howe, Fan,

space truss ^{3D}

bridge types: pratt, howe, warren, ...

shear force diagrams:



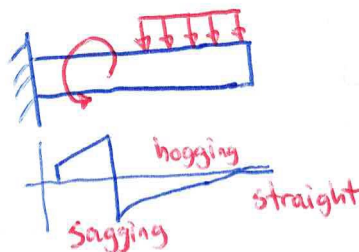
$$\frac{dV}{dx} = -w$$

bend moment diagrams:



$$\frac{dM}{dx} = V$$

bending members

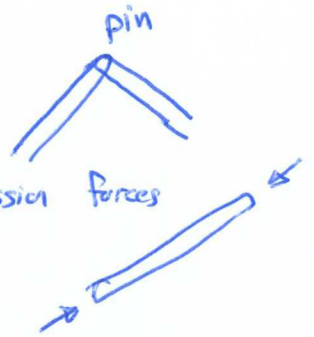


civl 46

assumptions

joints are pinned connections

members only carry tensil/compression forces



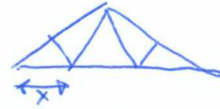
Questions

• do we deal with

statically
✓ indeterminate

• zero force members

• is there a best spot for: Fink, howe, ...



• build bridge (Project)

• axial force diagram ?

(shear & bending moment) ✓

tributary

~~tributary~~ width / Areas

56 bridge

UDL

