

Name: Solution

Name: _____

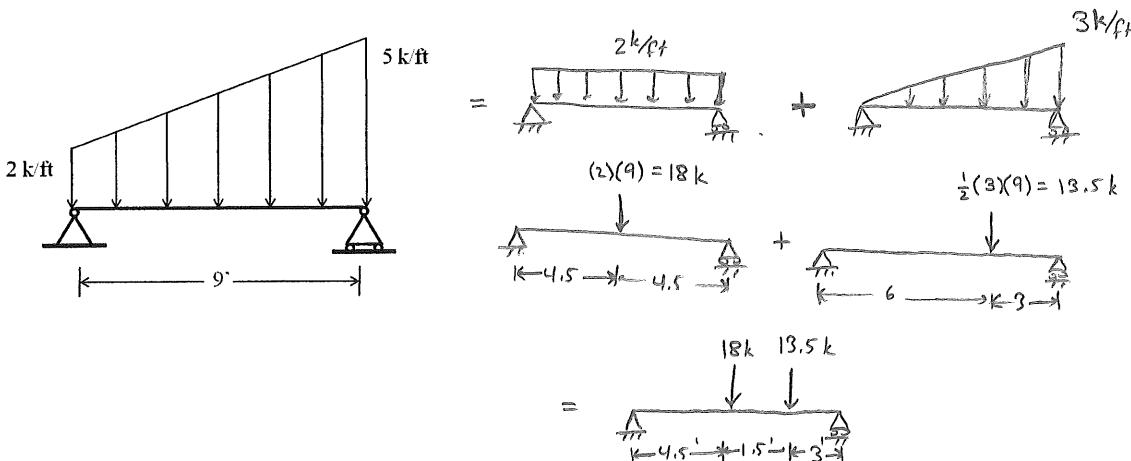
In-Class Problems #1

1. What does it mean for a structure to be considered *statically determinate / indeterminate*

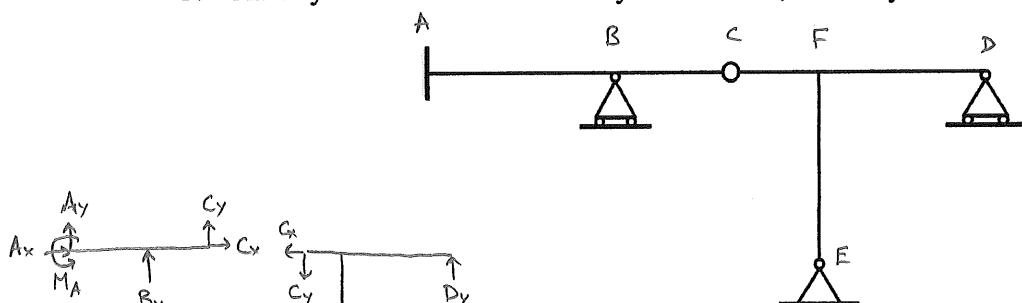
Determinate: all reactions and internal forces in the structure can be determined from equilibrium equations

Indeterminate: more unknown reactions and internal forces than equilibrium equations

2. Draw the resultant forces due to the distributed loading



3. Classify the structure as statically determinate, statically indeterminate, or unstable



the T piece on the right side can be broken up into 2 pieces and will yield the same results

$$r = 9$$

$$n = 2 \quad 3n = 6$$

$$r > 3n$$

statically indeterminate
to the 3rd degree

