## ENDS 231: Practice Quiz 3

Note: A one page (one sided) crib sheet is allowed during the quiz, along with a silent, non-programmable calculator.

Clearly show your work and answer.
The truss shown has the following support reactions:

$$
\text { short link at } E=85.0 \mathrm{k} \mathrm{(T),} C_{x}=59.1 \mathrm{k}, C_{y}=94.7 \mathrm{k}
$$

Using the method of joints only, find:
a) the member forces at joint A [or C or ...]
b) the remaining force at the adjacent joint E [or B or D ...]
c) [some short question from the text material]


Answers:
a) $\mathrm{AB}=10.3 \mathrm{k}(\mathrm{C}), \mathrm{AE}=18.2 \mathrm{k}(\mathrm{T})($ or $\mathrm{BC}=23.5 \mathrm{k}(\mathrm{T}), \mathrm{CD}=101.2 \mathrm{k}(\mathrm{T}))$ Disclaimer: Answers have NOT.
b) $\mathrm{BE}=33.2 \mathrm{k}(\mathrm{T}), \mathrm{ED}=80.3 \mathrm{k}(\mathrm{T})($ or $\mathrm{BD}=63.8 \mathrm{k}(\mathrm{C}), \mathrm{ED}=80.3 \mathrm{k}(\mathrm{T}))$

