A beam is a member that carries loads transversely, that is, perpendicular to its long axis.\textsuperscript{1}

**Beam Types:**
- Cantilever
- Simply Supported
- Propped Cantilever
- Continuous

A truss is a coplanar system of structural members joined at their ends to form a stable framework.\textsuperscript{2} The joints of a truss are assumed to be pinned.

**Truss Types:**
- Warren
- Pratt
- Howe
- Fink
- Bowstring
- Scissors
- Saw Tooth
- Three-hinged Arch

**Support Types:**
- Roller
- Pin
- Fixed

**Load Types:**
- Concentrated
- Distributed
- Concentrated Moment

Often times in engineering documents, we have to create different symbols and specify units for values. Type some commonly used symbols and units as shown below:

\[
F_{AB} = 200 \text{ N} \quad \theta_B = 30^\circ \quad A = 2.56 \text{ in}^2
\]

\text{Subscript text} \quad \text{Superscript text} \quad \text{Left Tab @ 2”} \quad \text{Left Tab @ 3.75”}

\text{9 pt Arial Font Italics & Underline} \quad \text{9 pt Arial Font}

\text{Type this text} \quad \text{Symbol Font} \quad \text{Make the degree symbol using the key sequence ALT 248 (Hold the ALT key & type the number 248 on the KEYPAD)}

\text{After last line, Insert – Break – Section Break – Next Page to go to the next page.}

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Type the alphabet using lower case letters with a space between each. Change the A and I back to lower case since they will be fixed automatically. Center your text on the page. Press the enter key two times after the ‘z’ to skip a row. Copy the alphabet to the second row. Change the font of the text to SYMBOL. Copy the roman letters below the Greek letters and change the case to all caps (Format – Change Case…). Copy the capital letters and change the font of the copy to symbol. Your document should look like the following:

\[ \text{a b c d e f g h i j k l m n o p q r s t u v w x y z} \]
\[ \alpha \beta \chi \delta \varepsilon \varphi \gamma \iota \kappa \lambda \mu \nu \omicron \pi \rho \sigma \tau \upsilon \omega \psi \zeta \]

Beam Types:
- Cantilever
- Simply Supported
- Propped Cantilever
- Continuous

Load Types:
- Concentrated
- Distributed
- Concentrated Moment

Number List:
- 123.456
- 78.9
- 1011.1213
- 14.151617

Justification Examples:
- Left Justified Text
- Center Justified Text
- Right Justified Text
Font Formatting:
The following text is included in the Start Document:

“Throughout the design and manufacturing process, engineers communicate their ideas through drawings and written documents.”

Copy the text 5 times allowing a blank line between the copies.
− Type: **12-point Times New Roman font**: before the first copy of the text. Format the text using 12 point Times New Roman font.
− Type: **8-point Arial font**: before the next copy of the text. Format the text using 8-point Arial font.
− Type: **13-point Symbol font**: before the next copy of the text. Format the text using 8-point Arial font.
− For each of the other copies, format the text using a font and size of your choice. There should be no repeats. Be sure to indicate the font before the copied text.

Memo:
− Open a new document in MS Word and create a memo using the standard format shown below. Save this file and use this format for all memos written for this course. Call the file METBD 050 Std Memo.doc. The formatting notes in Courier New font are not to be included in your memo document.

MEMORANDUM

TO: E. R. Evans, Jr.
FROM: Your Name
DATE: Value date
RE: Homework n

Start typing your memo here...

1-inch margins all around.

Insert Truss Figure in Header

In the footer, place the following text on the Left side of the page in 8 point Arial font: An Equal Opportunity Employer

HEADERS:
10-point Arial Font.
All UPPERCASE letters.

Skip a row between headers.

Write a memo to the instructor describing, in 150 words or less, yourself and your experience with MS Word, MS Excel, and MS PowerPoint. Be sure to use the spell checker before printing. Save your work in case the hardcopy is lost. This memo will be submitted separate from the rest of the assignment.