Beams

“A beam is a member that carries loads transversely, that is, perpendicular to its long axis.”

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

Trusses

“A truss is a coplanar system of structural members joined at their ends to form a stable framework.”

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. Some commonly used symbols and units are shown below:

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

NOTE ON FOOTNOTES:
The footnotes are NOT just numbers that are formatted to be superscript text.
You are to insert them as footnotes using the menu sequence:

Insert – Reference – Footnote…

You can use the help files (Help – Microsoft Office Word Help) and search for Footnote for additional information.

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 similar to the following:

Your text will have a black font color.

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

Skip three lines after the justification examples.
Font Formatting:

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

Copy the quote from the Start Document 5 times allowing a blank line between the copies. You will have a total of 6 copies of the quote in your document.

- 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 13-point Symbol 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. Call the file **METBD 050 Memo.doc**. The formatting notes in *Courier New* font are not to be included in your memo document.

```
Acme Truss Company
Station Road
Ente, PA 16669
914.996.5136

1-inch margins all around.

1. Insert Truss Figure in Header
2. 12-point Arial Font.
3. Bold
4. Title format – 12 point Arial Font.
5. Set a tab to line up header entries.
6. Expand text – 10 points
7. Center on page

MEMORANDUM

TO:  E R Evans, Jr.
FROM: Your Name
METBD 050.n
DATE: Due date
RE: Homework n

Start typing your memo here...

Heads:
10-point Arial Font.
All UPPER CASE letters.

Skip a row between headers.

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

Write a memo to the instructor describing, in 50 to 100 words, 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.