



Engineering Virtual Learning

HS Introduction to  
Engineering Design  
Lesson #32

May 19, 2020



**Objective/Learning Target:**  
Students will Learn about the use of  
Line Weight in Drafting.

# Bell Ringer:

Watch these videos about line weight.

[https://www.youtube.com/watch?v=YEYQe\\_81M4U](https://www.youtube.com/watch?v=YEYQe_81M4U)

<https://www.youtube.com/watch?v=YROiMGiKUf0>

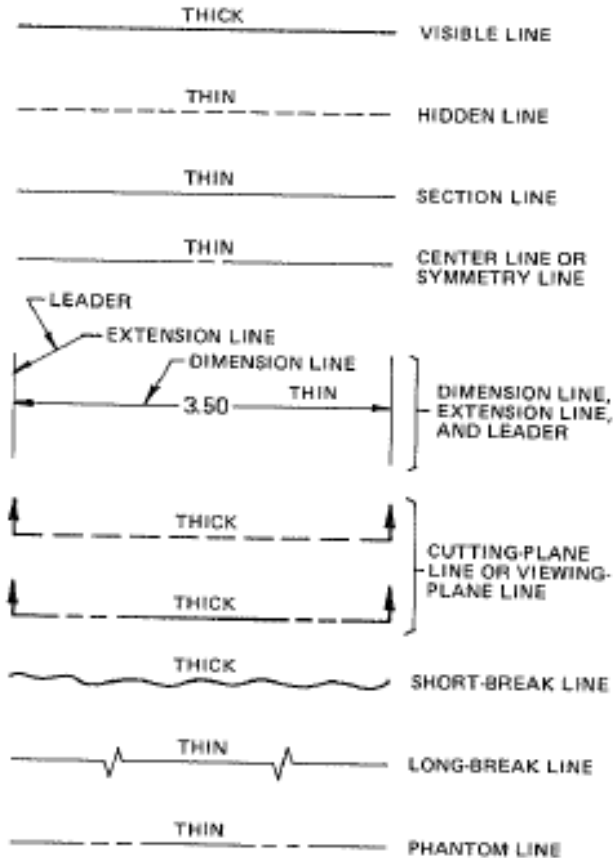
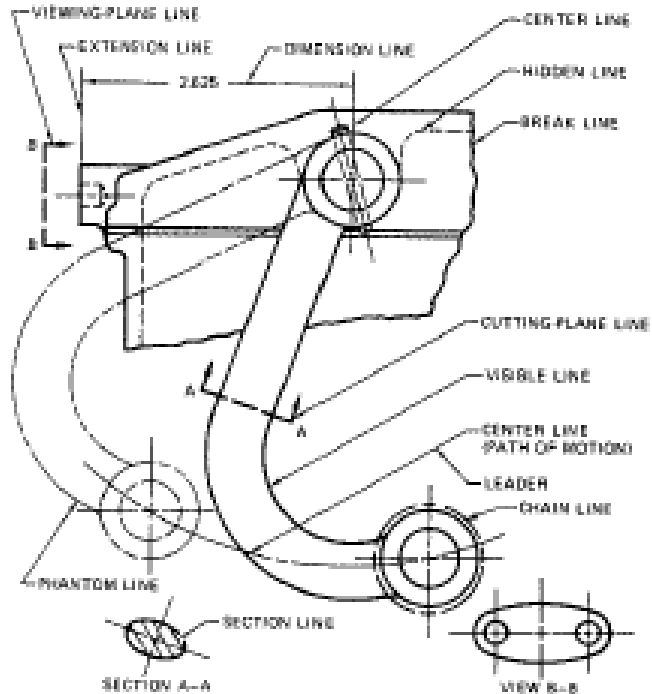
How can Line Weight affect your drawings?

# Learning Practice: Line Weight Activity

Use the examples below to complete the activity on the next page in your engineers notebook:

## THE ALPHABET OF LINES (ANSI)

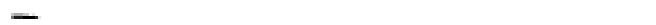
The illustrations below are for your information while completing the assignments on lines and line weights (thicknesses).



## ASSIGNMENT

Using pencil, draw additional lines that match the density and width of the printed samples shown below.

### VISIBLE LINES



### HIDDEN LINES



### SECTION LINES



### CENTER LINES



### DIMENSION LINES



### CUTTING-PLANE LINES



### VIEWING-PLANE LINES



### CUTTING-PLANE LINES



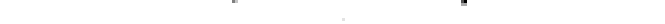
### VIEWING-PLANE LINES



### SHORT-BREAK LINES



### LONG-BREAK LINES



### PHANTOM LINES



# Learning Resource Links:

Line Weight:

[https://www.youtube.com/watch?v=YEYQe\\_81M4U](https://www.youtube.com/watch?v=YEYQe_81M4U)

<https://www.youtube.com/watch?v=vh-QKKRFD14>

Concept Sketching:

[https://www.youtube.com/watch?v=z8\\_-J8V6E38](https://www.youtube.com/watch?v=z8_-J8V6E38)

<https://www.youtube.com/watch?v=s80WqMyVIsY>

Grid and Isometric Graph paper:

[https://www.printablepaper.net/category/isometric\\_graph](https://www.printablepaper.net/category/isometric_graph)