



PLTW Virtual Learning

7th and 8th Grade Design and Modeling

April 21, 2020



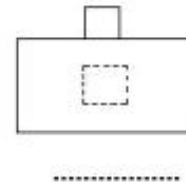
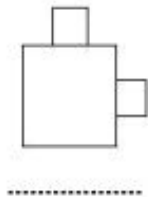
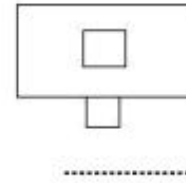
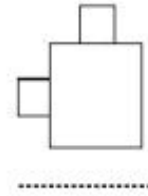
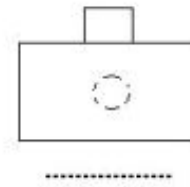
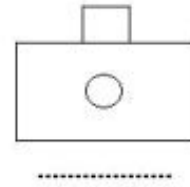
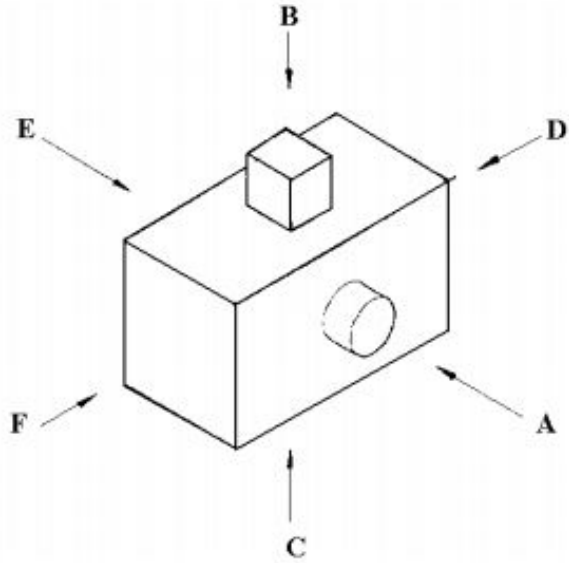
Lesson 1: Multi-View Drawing Day 2

Objective/Learning Target:

Students will understand the properties of multi-view drawings and be able to draw shapes in multi-view.

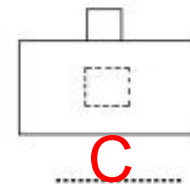
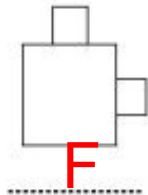
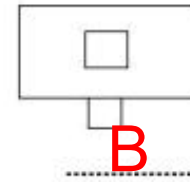
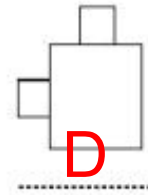
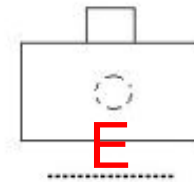
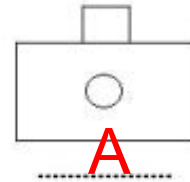
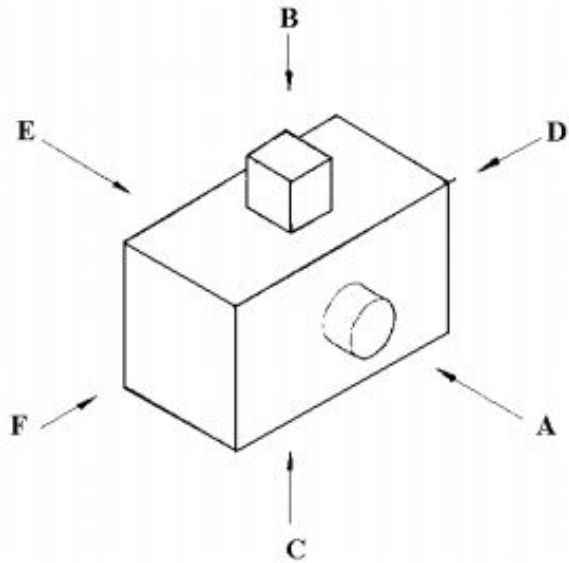
Warm-Up:

Label the views with the corresponding letter.



Warm-Up: Answer

Label the views with the corresponding letter.



Lesson Introduction/Background Information:

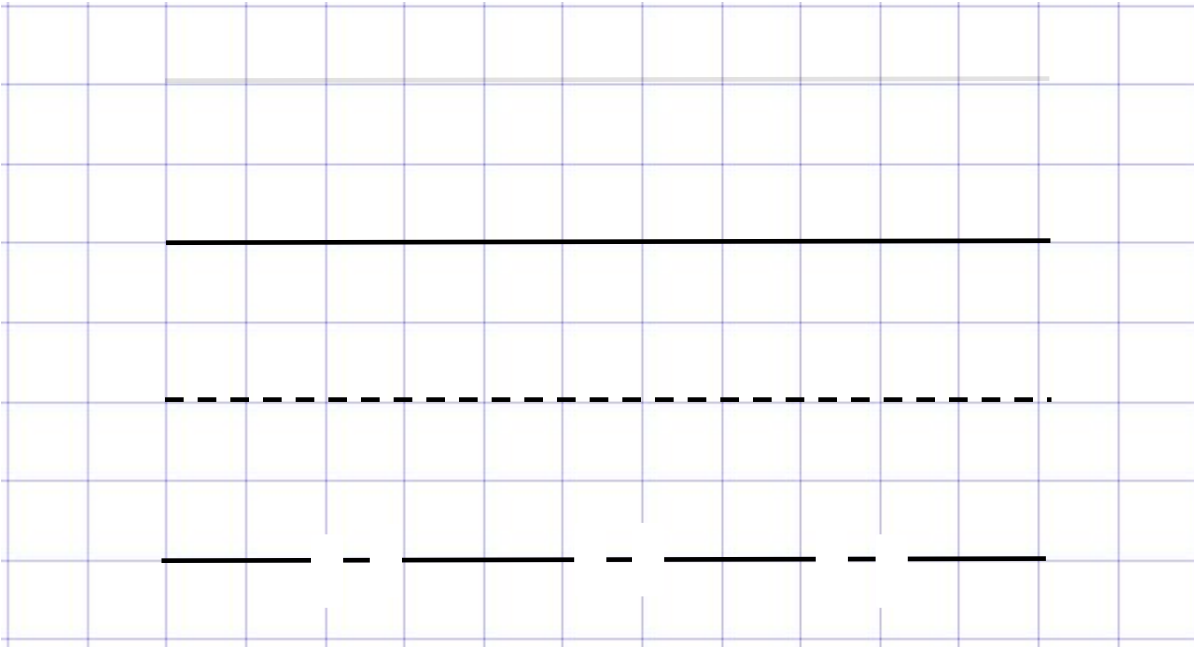
Get out the multi-view notes we started yesterday. As you progress through today's lesson add to your notes.

Engineers have their own language when it comes to drawing. We are going to learn about 4 different types of lines used in multi-view drawing.

Multi-View

In the warm up, did you notice that some views had shapes outlined in a dotted or dashed line? Go back to the warm up and take a look at the different views. Can you come up with an explanation for the meaning of these dashed lines?

Language of Lines



Construction- lightly drawn to help build a shape

Object- bold outline of the final shape

Hidden- dashed line to indicate a change in shape when not directly seen from that view

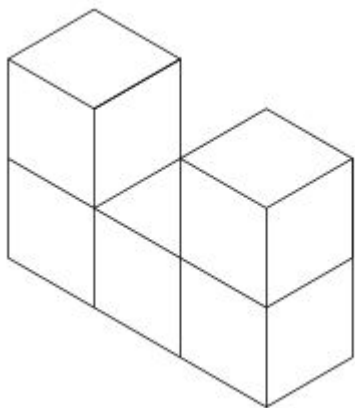
Center- a dashed line with the pattern long-short-long to indicate the middle of a circle

The lines in the warm up were hidden lines. Great job!

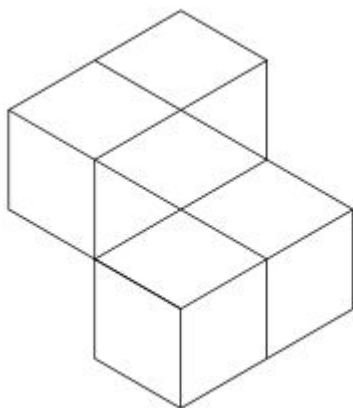
Practice:

Draw the following shapes in multi-view.

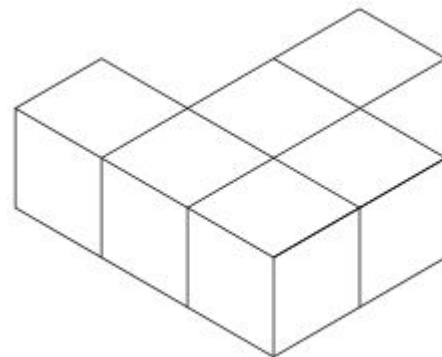
A

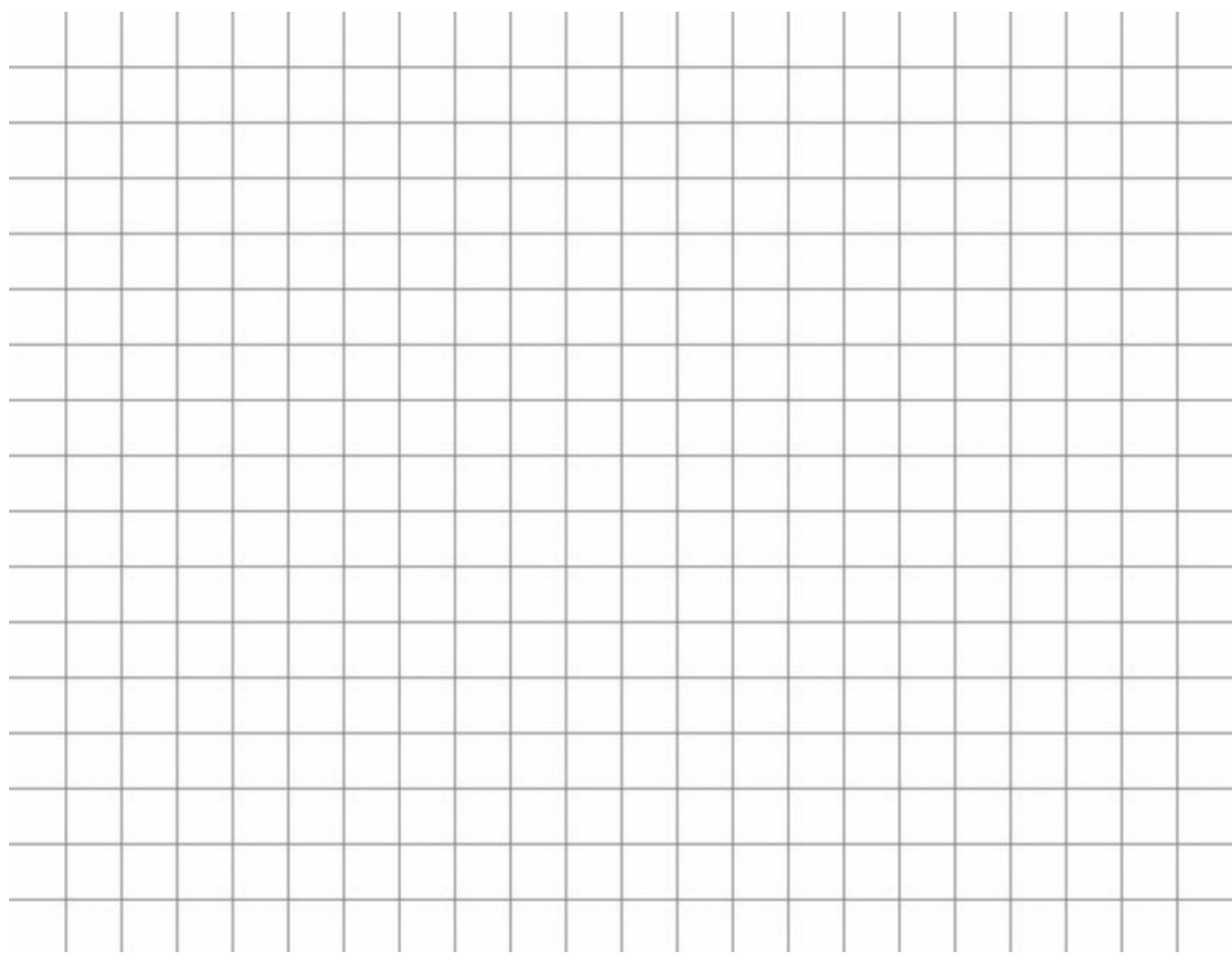


B



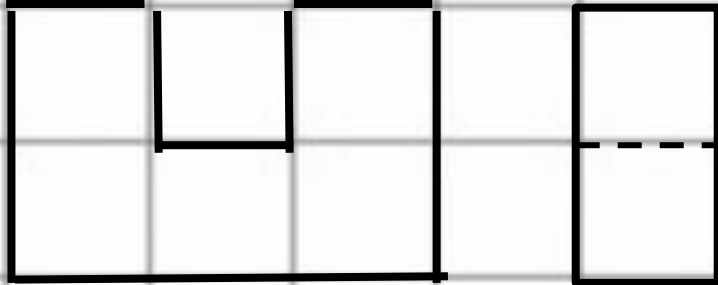
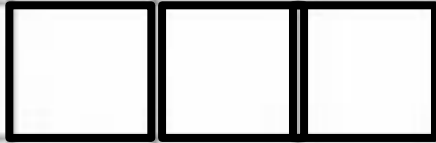
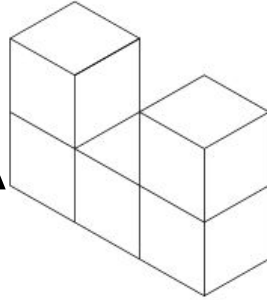
C





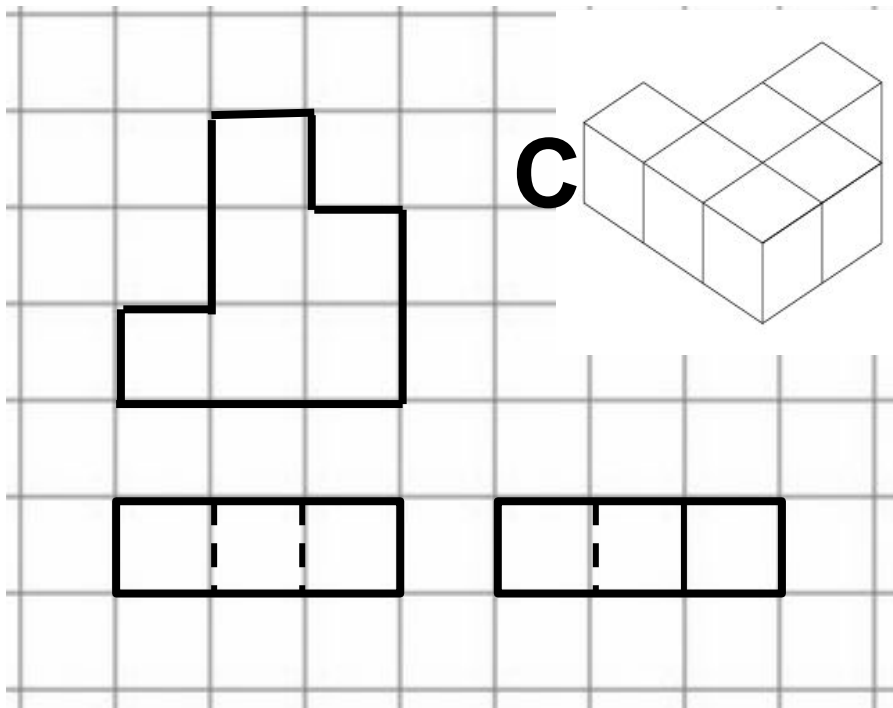
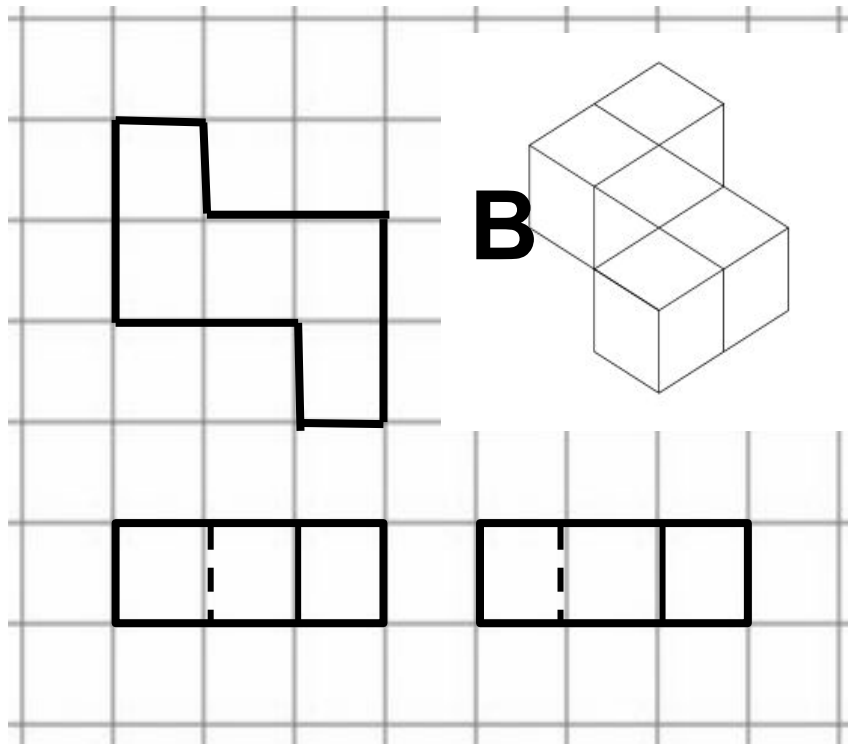
Answers

A



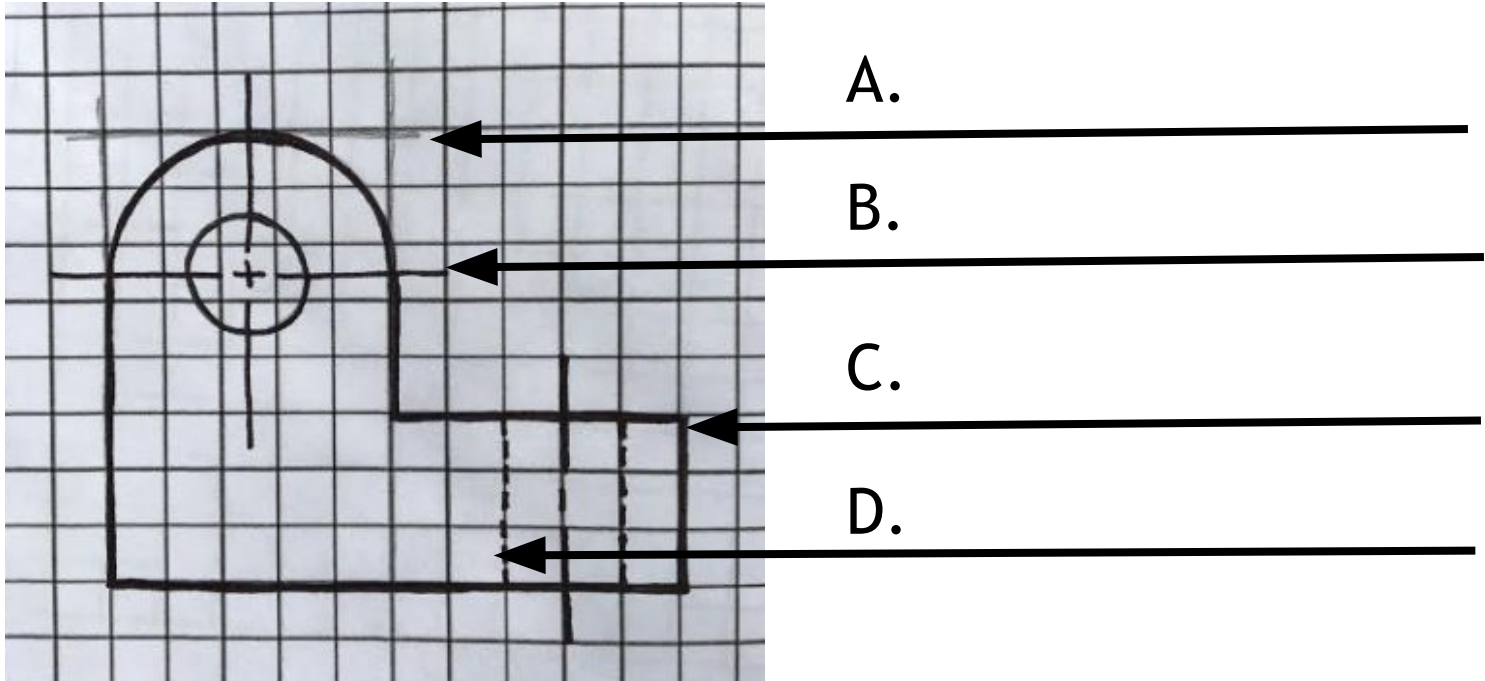
From the side, the view is a 1x2 rectangle. But we have to include the hidden line showing cut out in the shape.

Answers



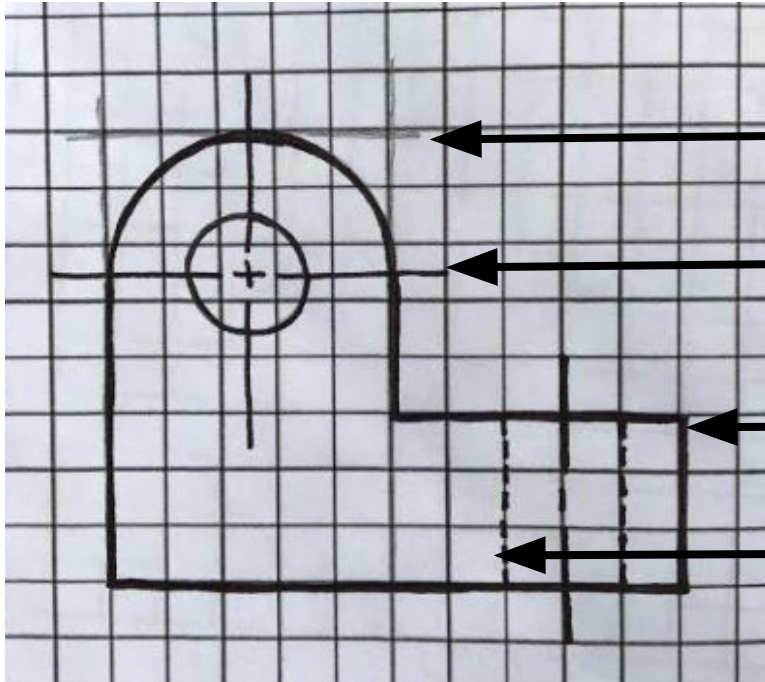
Self-Assessment:

Label the different types of lines on the drawing.



Self-Assessment: **Answers**

Label the different types of lines on the drawing.



A. **Construction**

B. **Center**

C. **Object**

D. **Hidden**

Extend Your Learning/Continued Practice:

Watch the video for another example of multi-view drawing.
Try drawing along with the video.

[Multi View Drawing](#)