

**6.5A**

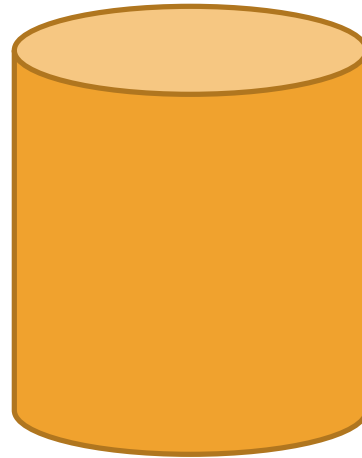
# **SPACE GEOMETRY**

## **Objectives**

- 1. Introduce some basic solids.**
- 2. Be able to sketch the basic solids.**

# SPACE GEOMETRY

- **3-D figures**
- **Objects not restricted to flat surfaces**



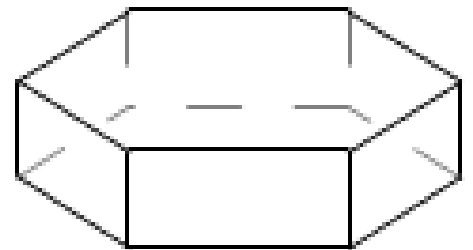
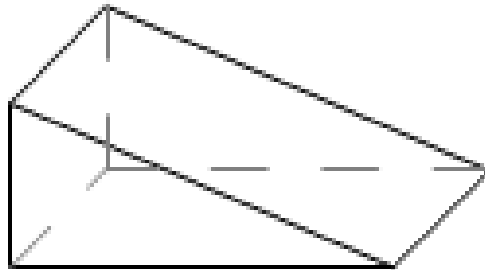
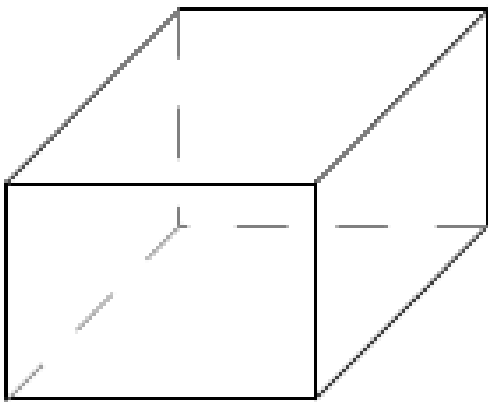
# **DRAWING SPACE OBJECTS:**

## **Solid Lines**

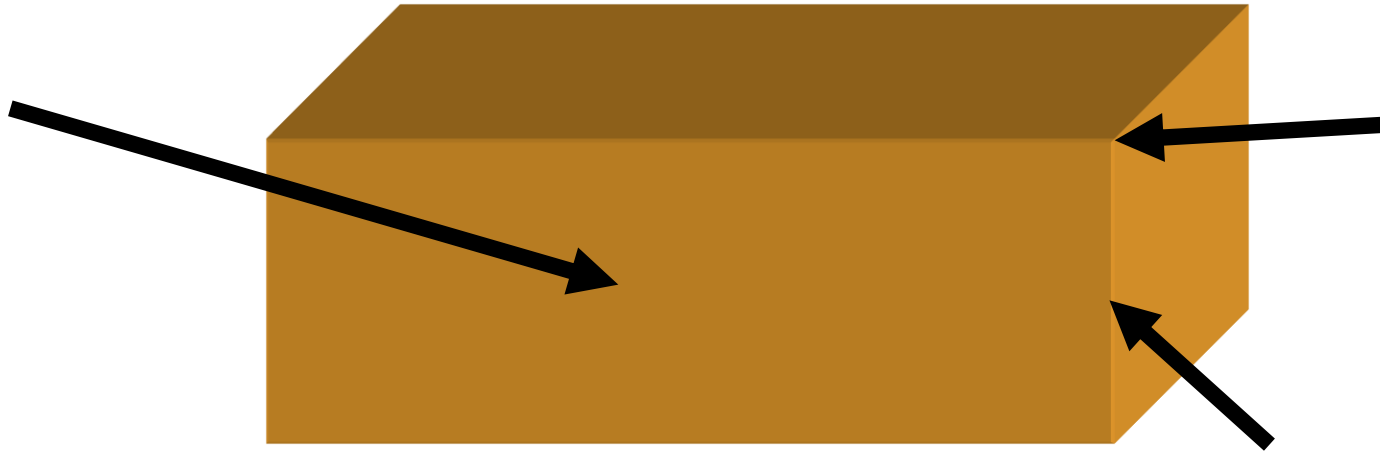
**Lines that you see**

## **Dashed Lines**

**Lines that would be visible if object was solid**



# RECTANGULAR SOLID



# **DRAWING RECTANGULAR SOLIDS**

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## **FACE-FORWARD**

# **DRAWING RECTANGULAR SOLIDS**

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## **EDGE-FORWARD**

# **DRAWING SOLIDS**

## **CYLINDER**

# **DRAWING SOLIDS**

## **SQUARE PYRAMID**



# **DRAWING SOLIDS**

## **PENTAGONAL PYRAMID**

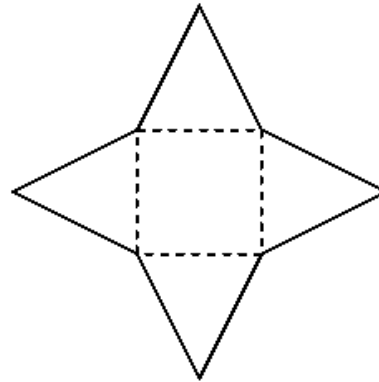
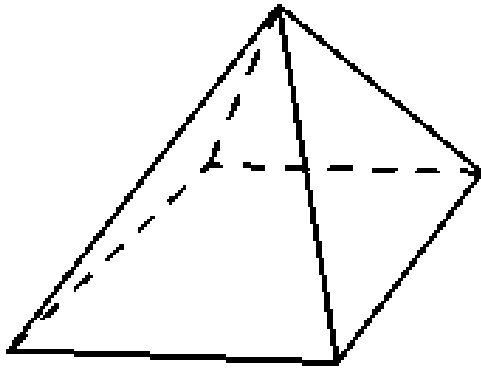
# **DRAWING SOLIDS**

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## **SPHERE**

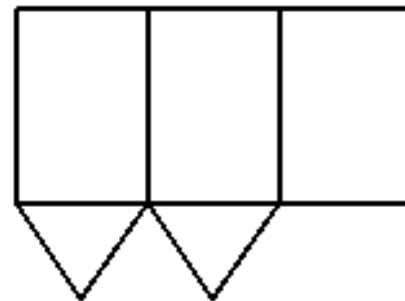
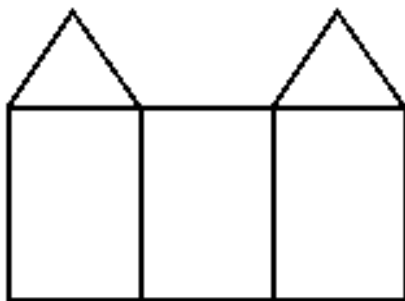
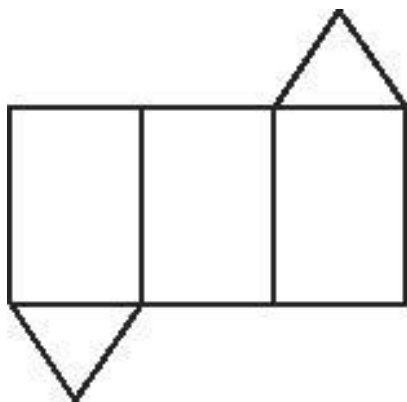
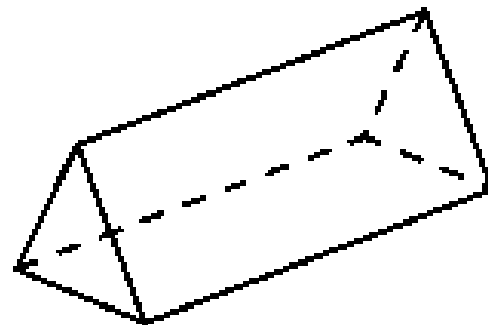
# NETS

A two-dimensional flat diagram that represents a three-dimensional figure. It shows all of the shapes that make up the faces of a solid.



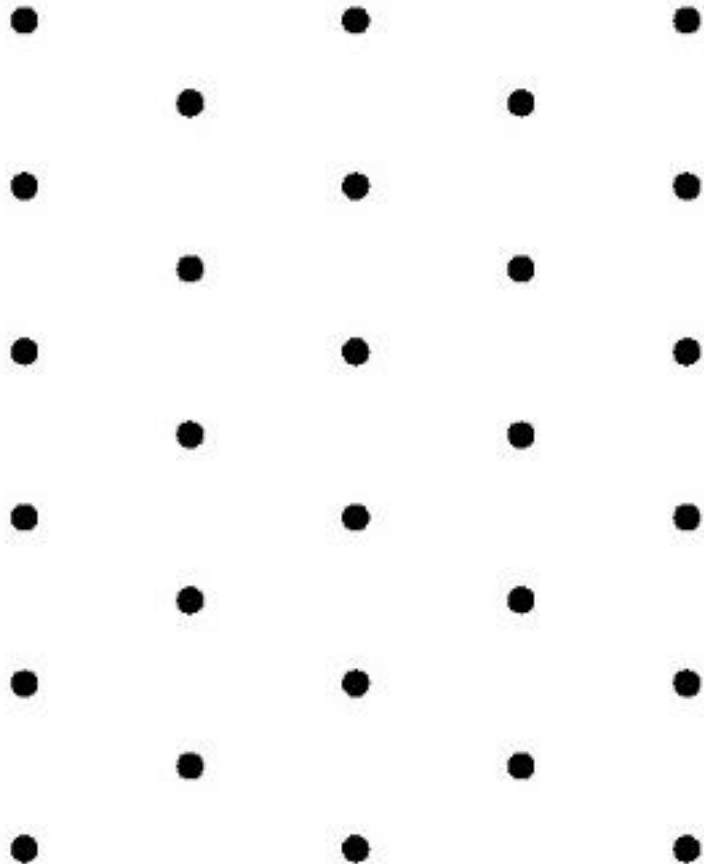
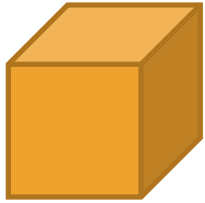
# NETS

What is a possible net for the figure shown?



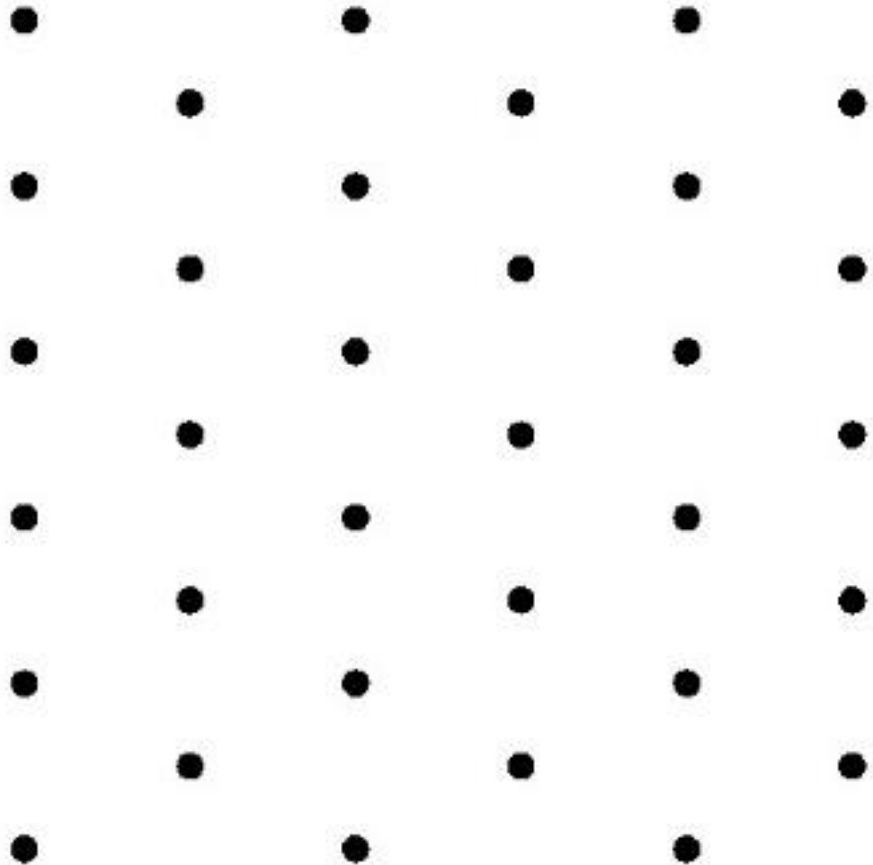
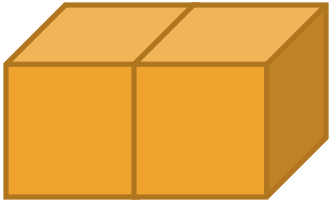
# ISOMETRIC DRAWINGS

An *isometric drawing* is an edge-forward drawing of a three-dimensional figure. It shows the top, front, and side views.



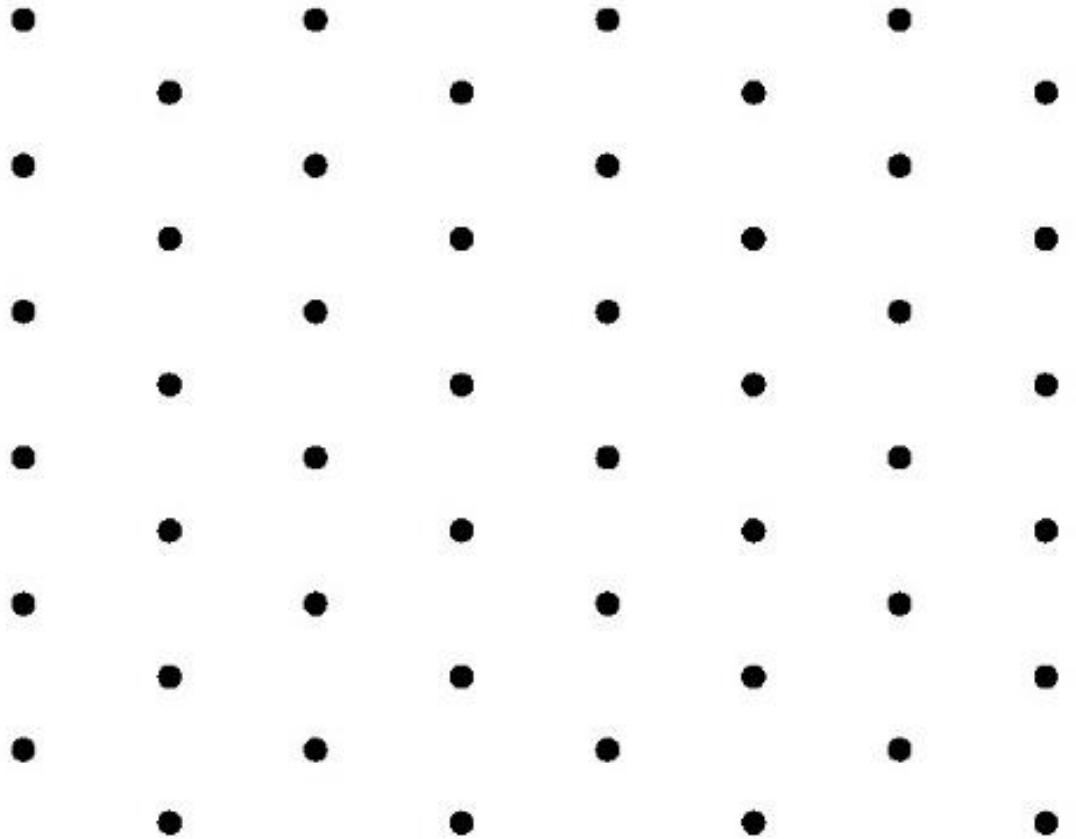
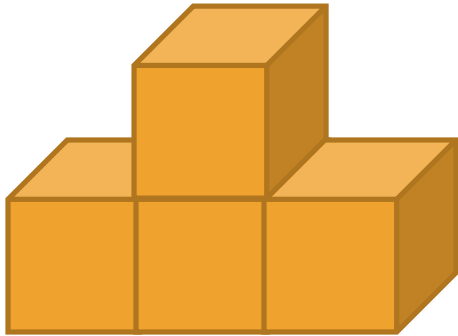
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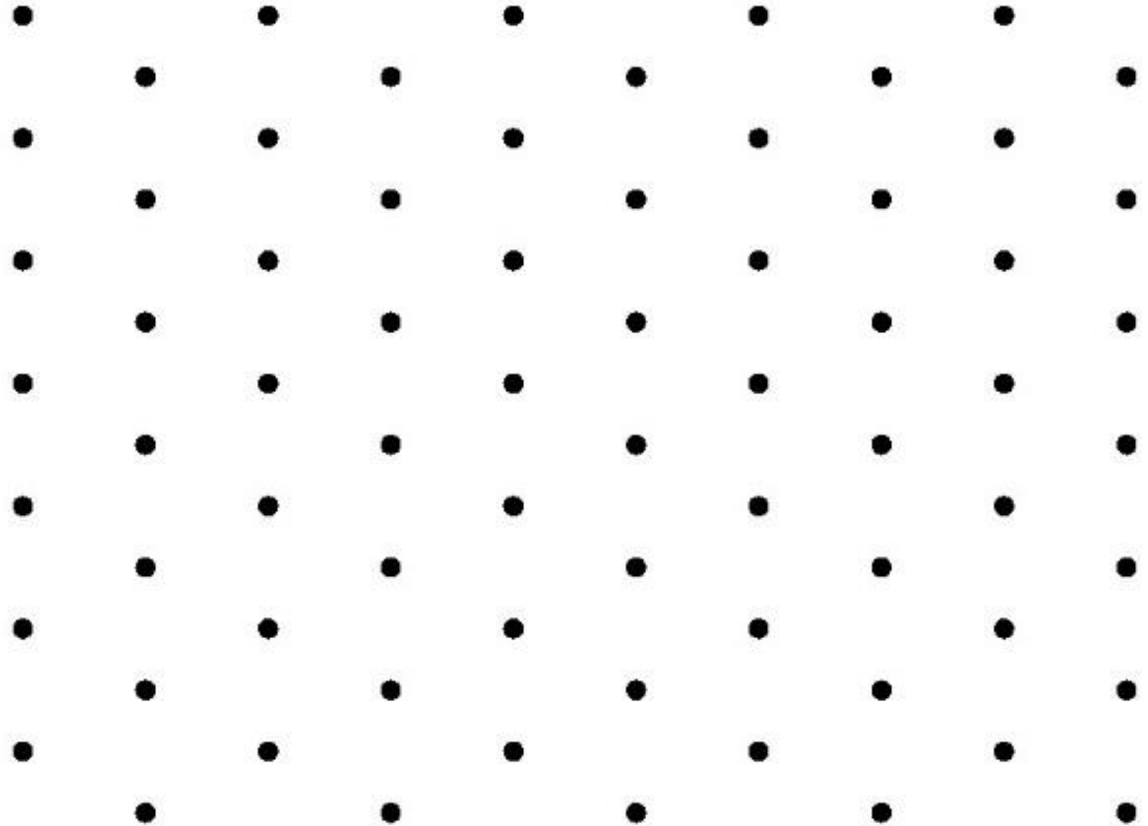
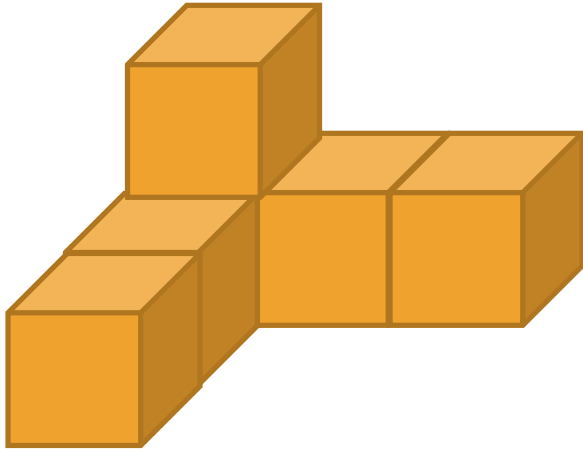
# ISOMETRIC DRAWINGS

An *isometric drawing* is an edge-forward drawing of a three-dimensional figure. It shows the top, front, and side views.



# ISOMETRIC DRAWINGS

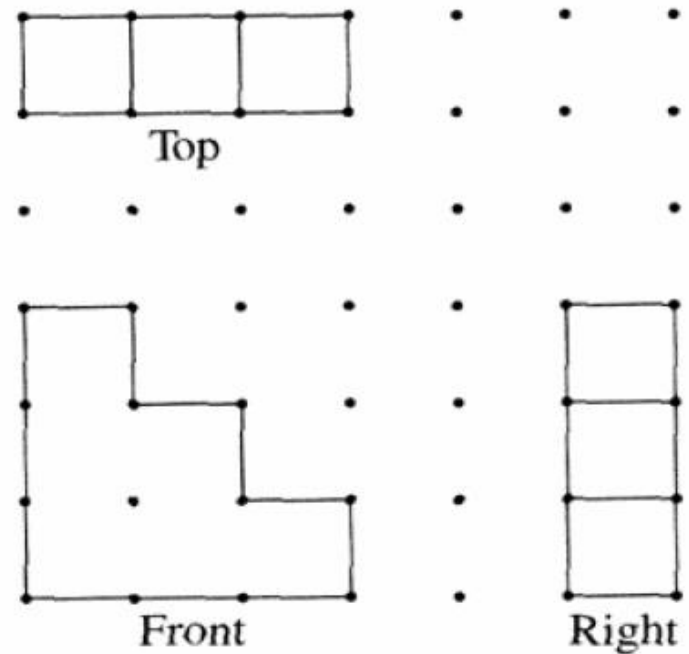
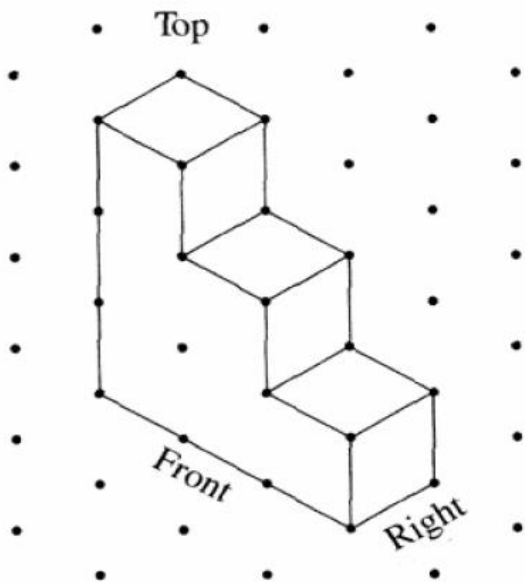
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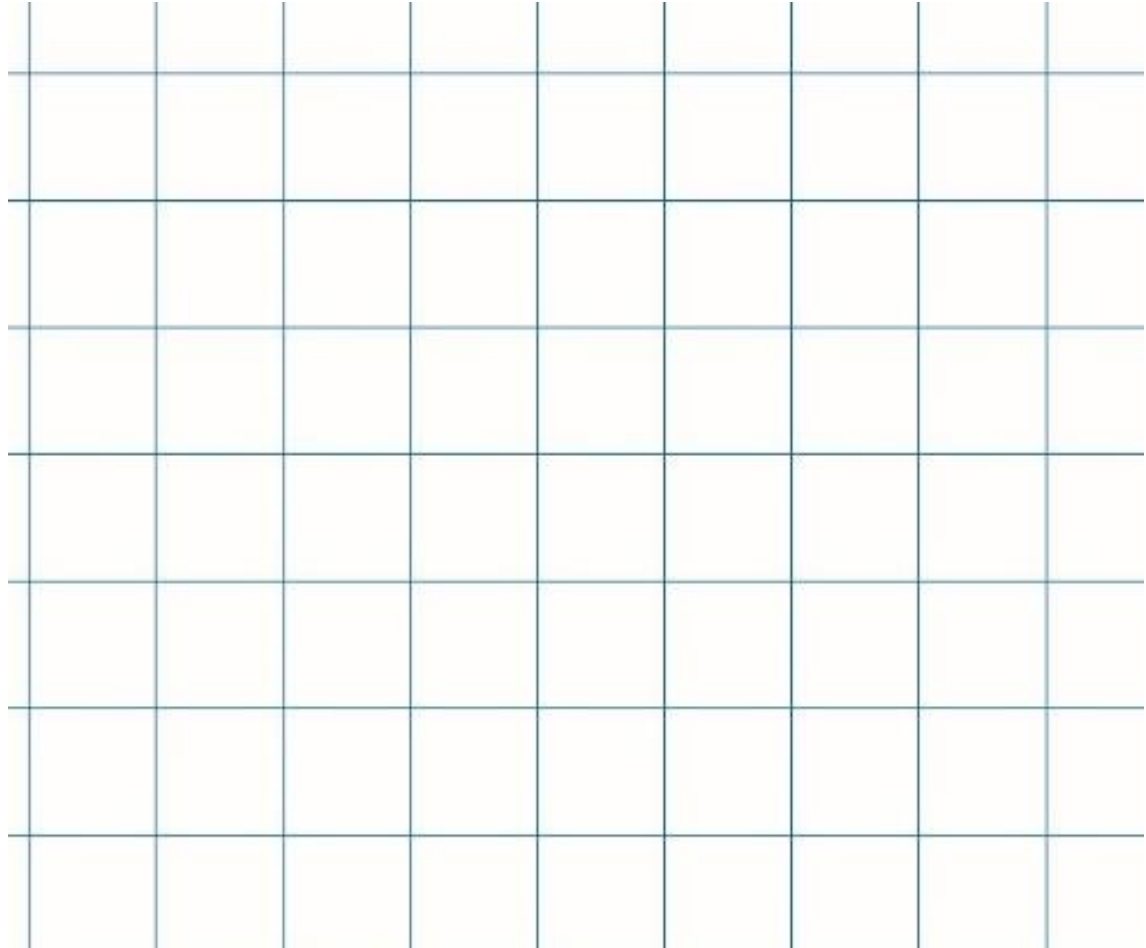
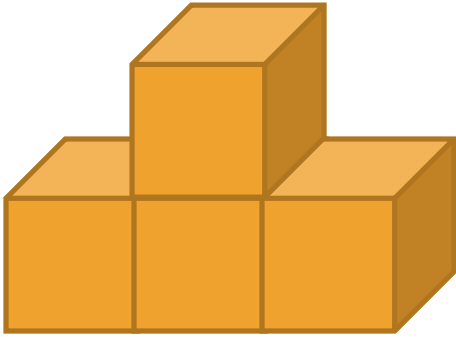
# ORTHOGRAPHIC DRAWINGS

- Shows the views of an object in 2-D
- Usually the top, front, and right side views.



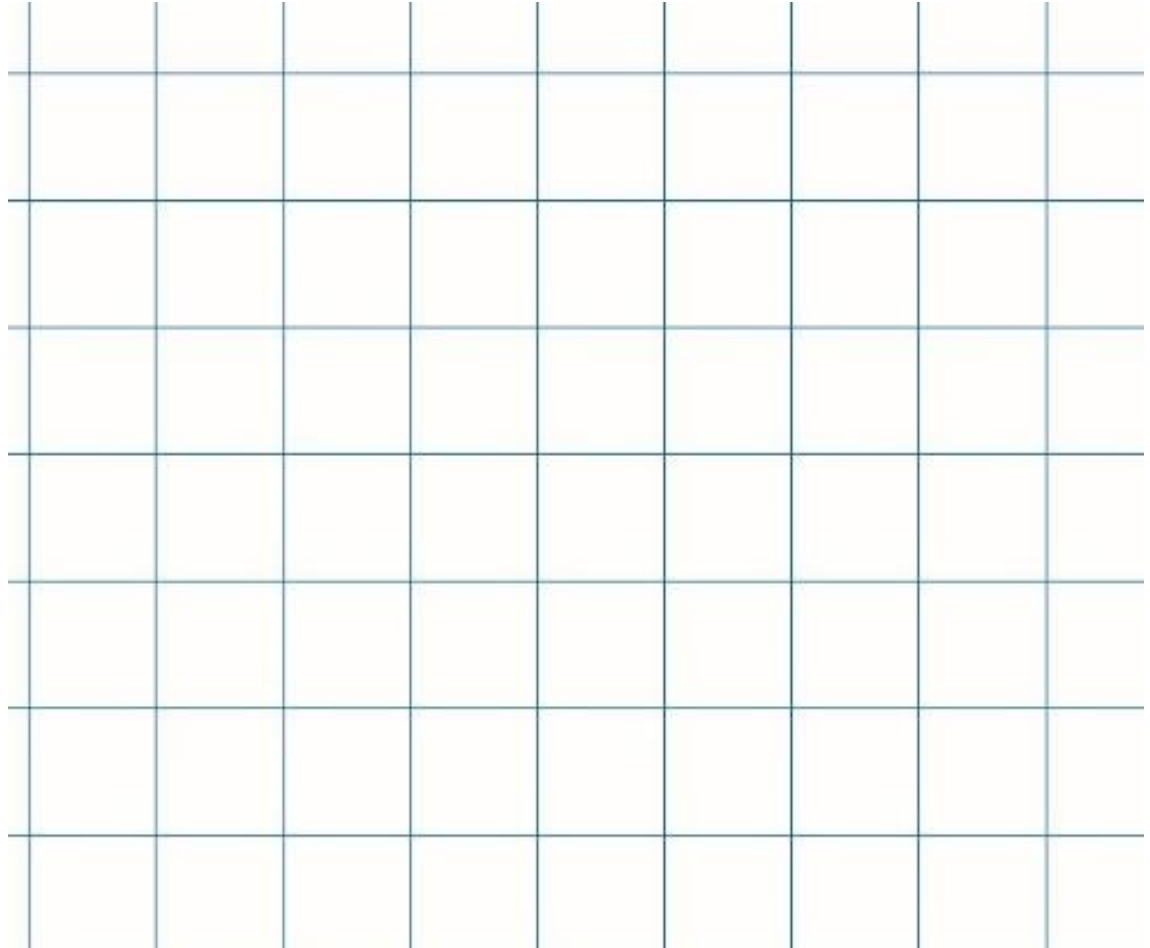
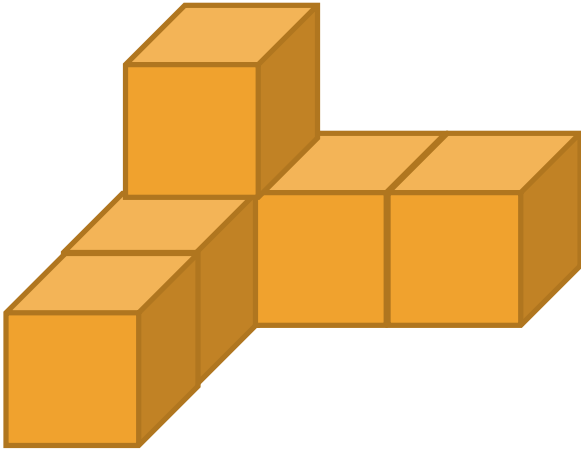
# ORTHOGRAPHIC DRAWINGS

- Shows the views of an object in 2-D
- Usually the top, front, and side views.



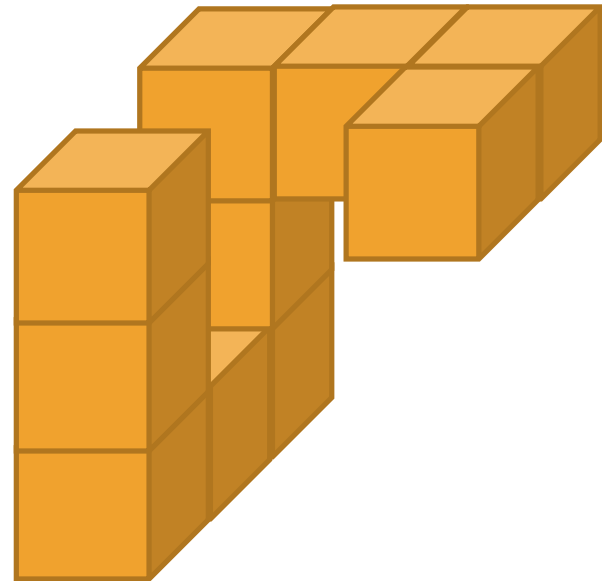
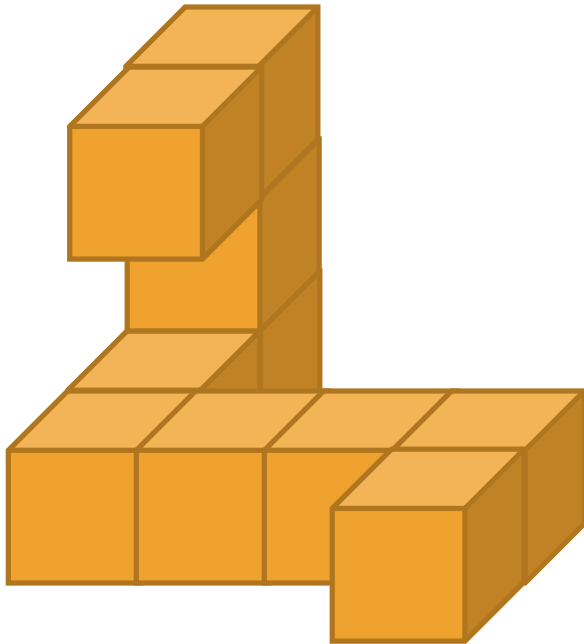
# ORTHOGRAPHIC DRAWINGS

- Shows the views of an object in 2-D
- Usually the top, front, and side views.



# CHALLENGE PROBLEMS

Draw the isometric and orthographic drawings of the following.



# CHALLENGE PROBLEMS

Draw the isometric and orthographic drawings of the following.

