

Name: _____

GEOMETRY

WORKSHEET - ISOMETRIC AND ORTHOGRAPHIC DRAWINGS

ISOMETRIC DRAWING – a three dimensional drawing of a solid figure

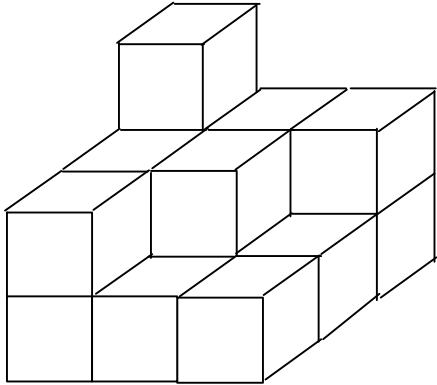
FOUNDATION DRAWING – a view of the bottom of a solid that contains the height of each column.

ORTHOGRAPHIC DRAWING – three drawings that show the top view, front view, and right view of an isometric drawing.

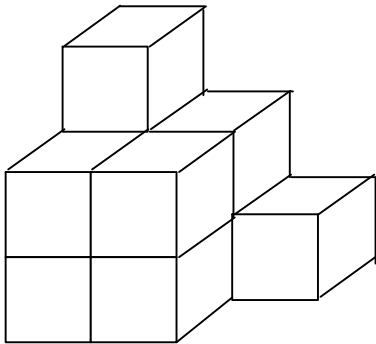
Look at the solids below.

- a. Draw the foundation drawing.
- b. Draw the orthographic views of the front, top, and right side.

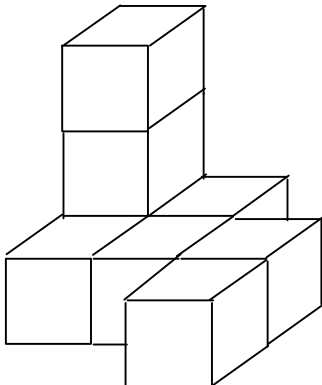
1.



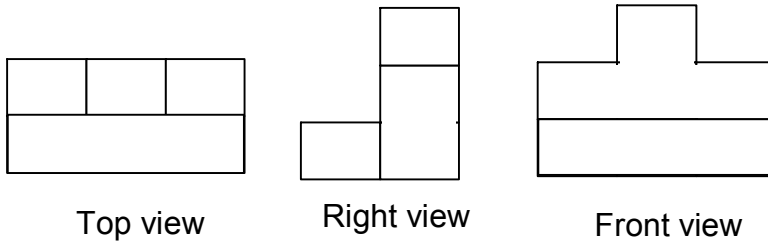
2.



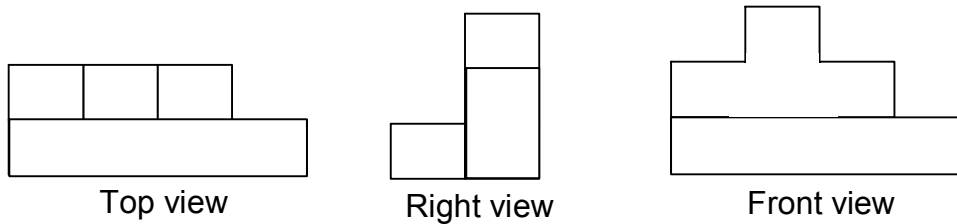
3.



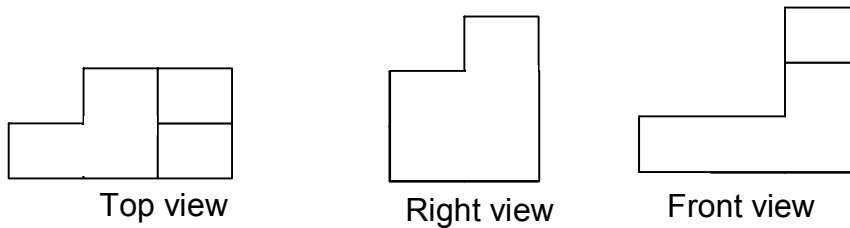
4. The top, side, and front views of an object built with cubes are shown below.
How many cubes are needed to construct this object?



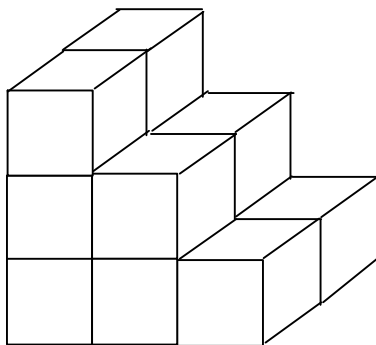
5. The top, side, and front views of an object built with cubes are shown below.
How many cubes are needed to construct this object?



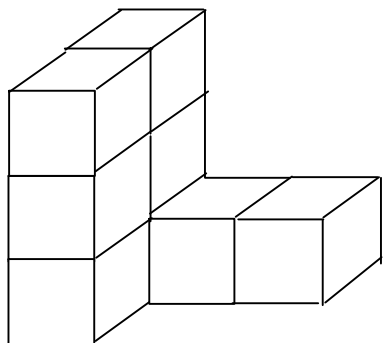
6. The top, side, and front views of an object built with cubes are shown below.
How many cubes are needed to construct this object?



7. The three-dimensional figure below is formed of cubes measuring 1 foot on each edge.
If one pint of paint covers 3 square feet, how many pints of paint are needed to paint the top and sides of the figure below.

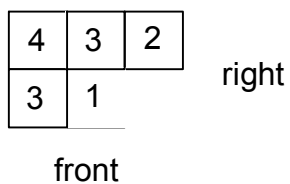


8. The three-dimensional figure below is formed from cubes with each edge 1 inch in length. What is the volume of the figure below?

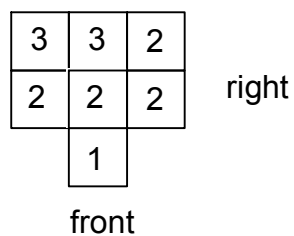


Use the following foundation drawings to draw the isometric drawings.

9.



10.



Revised 6/5/2007