NAME_____ CLASS PD_____

Spatial Relations

VOCABULARY

    Spatial-

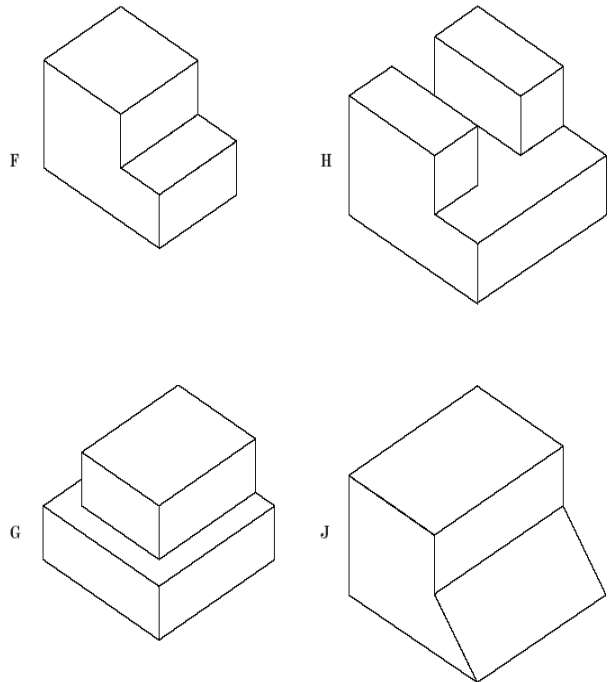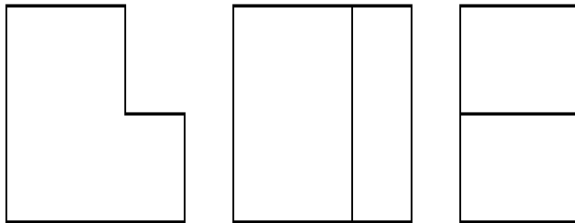   Dimensions-

    3-D-

    View-

    Model-

1.

Match the three views of this solid to its 3-dimensional sketch.

F

H

G

J

Look at the first shape. This looks like the side. Look at the drawings

Only ___ and ____ have this figure. Eliminate ___and __.
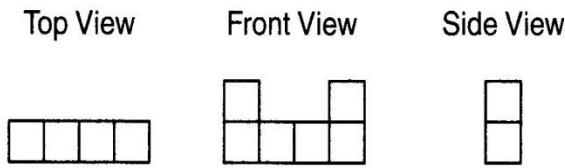
Look at the second figure. This is the top.

___ would look nothing like this from the top
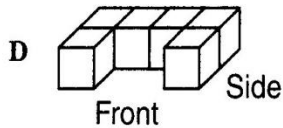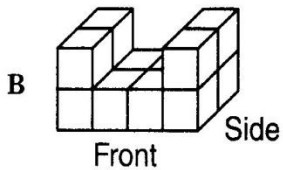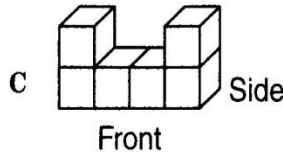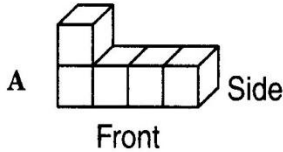
The last figure must be the front.

Draw what the front of each figure would look like. So, what is the answer?

2.

The drawings below show the top, front, and side views of a 3-dimensional object.

Top View   Front View   Side View

Which solid figure has the top, front, and side views shown?

A   Side   Front

B   Side   Front

C   Side   Front

D   Side   Front

Shade the Top of each answer in one direction.⇕ Now shade the fronts in a different direction. ⇔ Compare each model to the Top, Front and side views
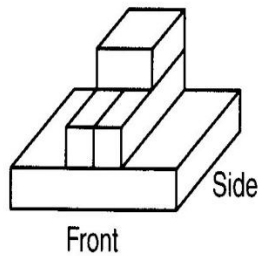
The top view has only _____row of blocks.

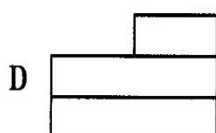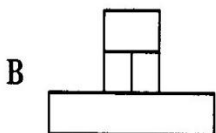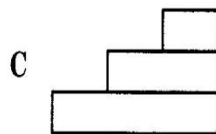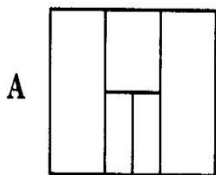Only ___and ___are one row deep. Eliminate ___and___.

Only the front of ___and ____ matches the given front view.

Also, the side matches ___ and ___. Which matches all three views?   The answer is ____.

3. The object below is built from blocks.

Side

Front

Which is not a top, front, or side view of the object?

A

C

B

D

Shade the top of the figure in one direction.⇕ Lightly shade A. Does this match your picture? _____
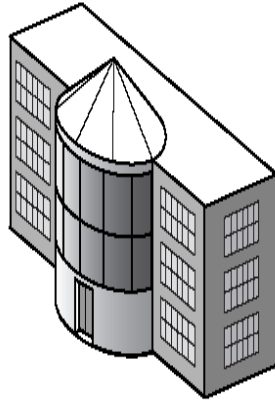
Now shade the front in one direction. . ⇔   Shade B. Does it match either the top or front? _____.

Now lightly shade the side and C. Do they match?_____
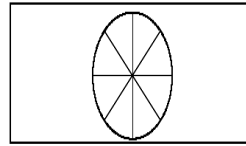
What about D? Does it match either top, front, of side?
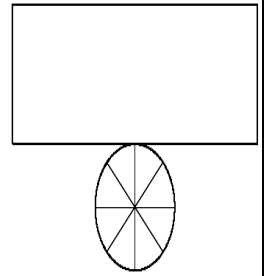
4.

The drawing shows a view of a building.

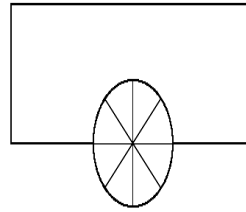Which drawing best represents the top view of this building?
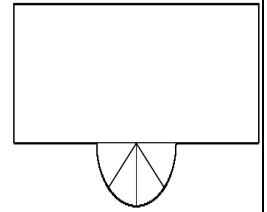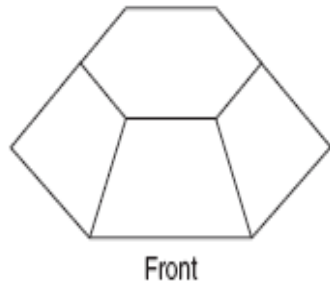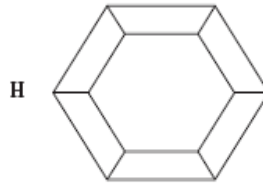
A

B

C

D

- ➢ A. shows the entire circle on the building
- ➢ B. The top circle sticks out in front of the building and is on part of the top of the building.
- ➢ C. shows it all in front of the building
- ➢ D. shows it stopping at the edge of the building.
- ➢ Only ___is correct.

5.

The drawing below shows a solid with hexagonal bases.

G

Front

Which drawing best represents the top view of this hexagonal solid?

H

F

J

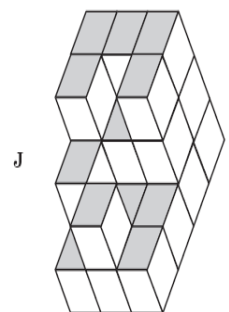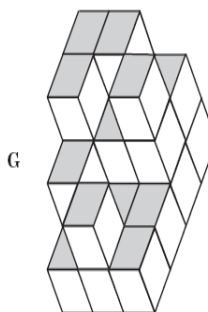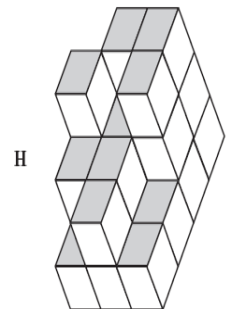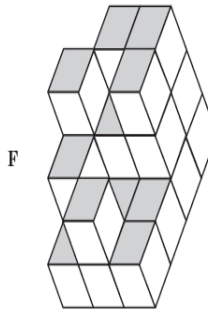| What is the shape of the top of the solid?_____ What are the sides called?_____ Let's see what a net would look like: If **F** were the answer, the shape would have vertical sides and not visible.	Answer **G.** Do you think that the other three sides coming off of the top would not have sides?_____ **J.** If you looked down at the solid, would you see where the sides come together? So???????

The drawing below shows both the top view of a solid structure built with identical cubes as well as the number of cubes in each column of the structure.

6.

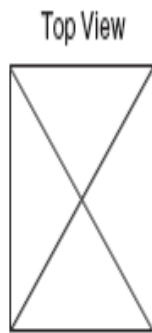| 2	3	3
3	2	3
2	1	1
1	2	1

Front

F

H

G

J

Which 3-dimensional view best represents the same structure?

Count the blocks in each column for each answer. Label the columns with the # of blocks.
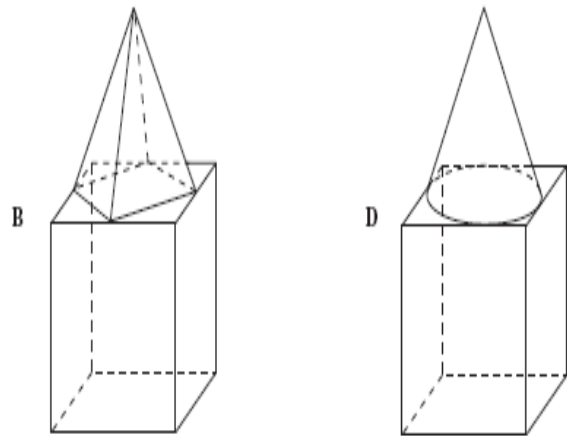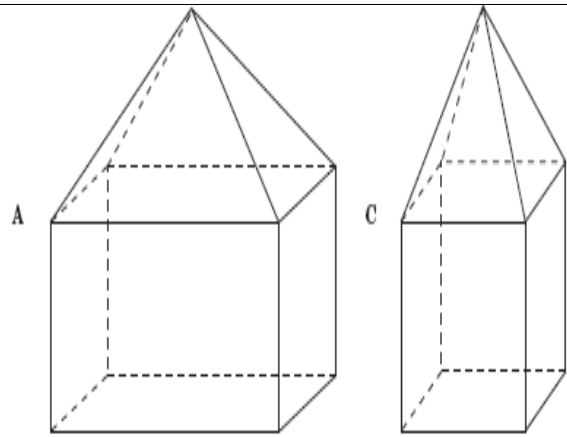Which one has the matches the problem?

7.

The drawing shows the top view of a 3-dimensional object.
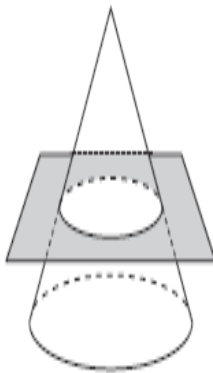
Top View

Which of the following drawings best represents this 3-dimensional object?

What does this figure represent? Compare to the answer selections and choose.
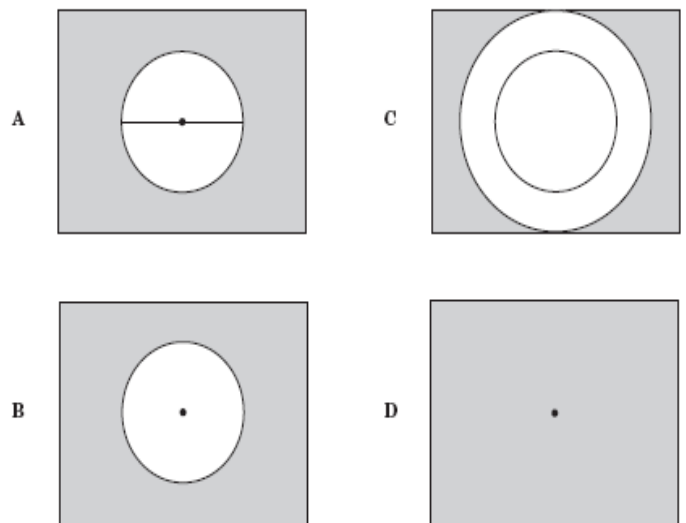

8.

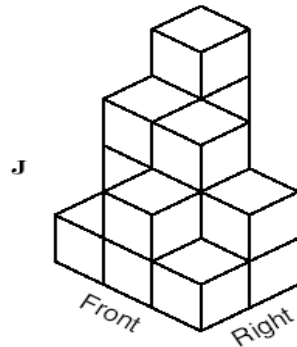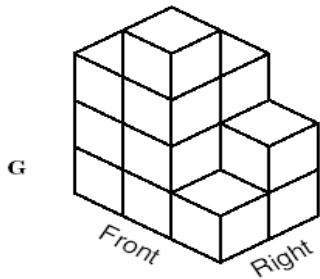Lee designed a table that appears to be a cone with a wooden board passing through it, as shown below.
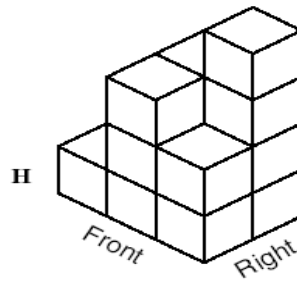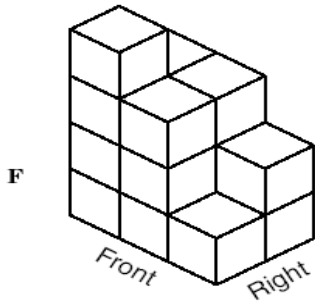

Which of the following best represents a top view of this table?

- ➢ A. Is there a line through the cone?
- ➢ C. Are their two cones?
- ➢ D. Would the cone disappear?

9..

Which 3-dimensional view represents the same structure?

F

Front   Right

H

Front   Right

G

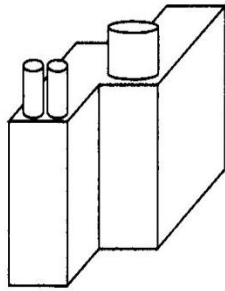Front   Right

J

Front   Right

4	3
3	3
1	2

The drawing shows the top view of a Structure built with cubes COUNT the number of cubes in each stack. Label each stack with the number.
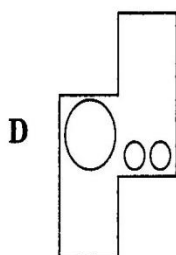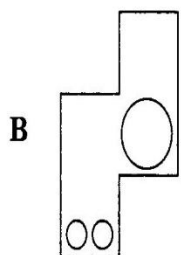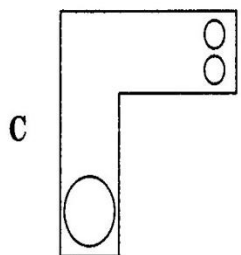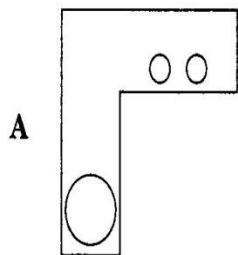
The chart shows how many cubes should be in each stack. Which one matches the chart?

10.

The drawing below shows a 3-dimensional model.

Which best represents the top view of the model?

A

C

B

D

The model has a jog in it. So eliminate ___ and ___.

The two little cylinders are on one end, and that is only seen in ___ and ____.

The big circle is in the middle like ___ and ___.

They all match which drawing? The answer is _____.