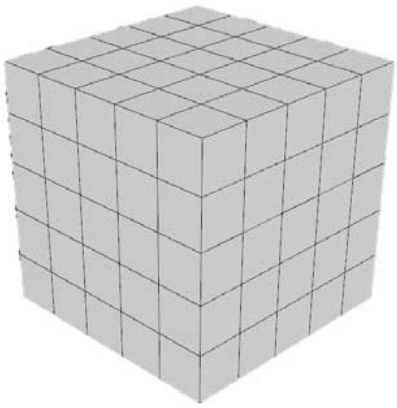
3-D Cubes

The following exercises will test your visual perception, as well as the ability to use basic geometry

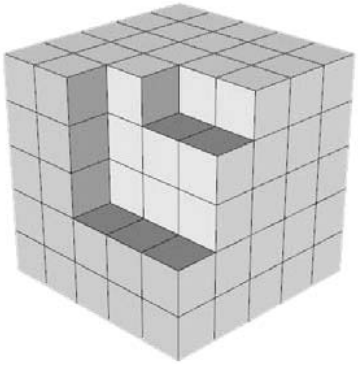
1 The following questions refer to the cube below.



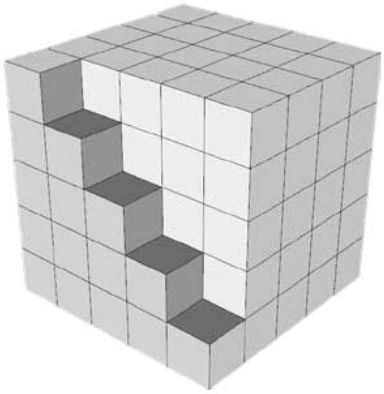
a. How many individual cubes were needed to build the larger cube, as shown on the right?

b. If you paint the entire cube in blue, how many cubes will have at least one blue face?

2 Which of these models have had more cubes removed?

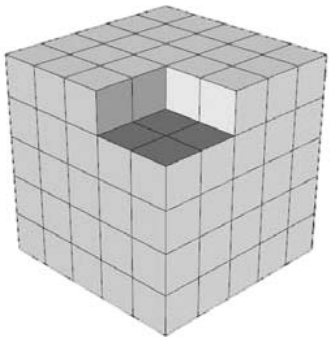


a.

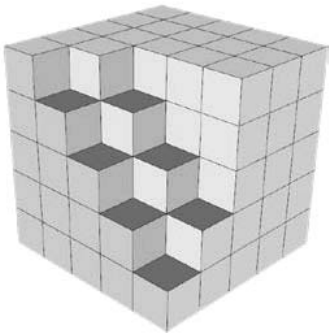


b.

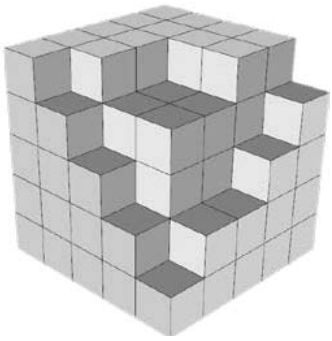
3 How many cubes have been removed from the larger cube?



a. _____

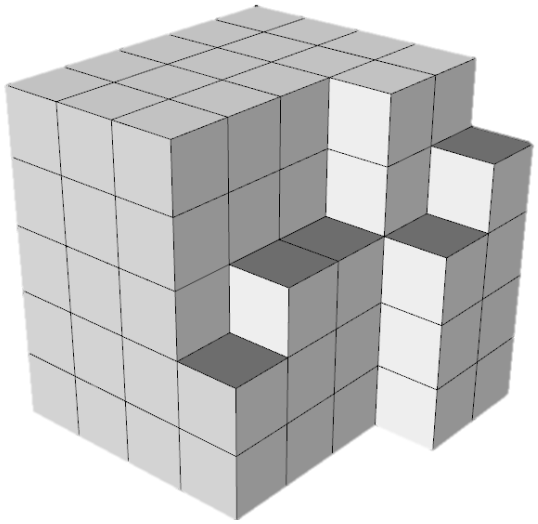


b. _____



c. _____

4 For the model below, how many cubes have been removed from the larger cube?

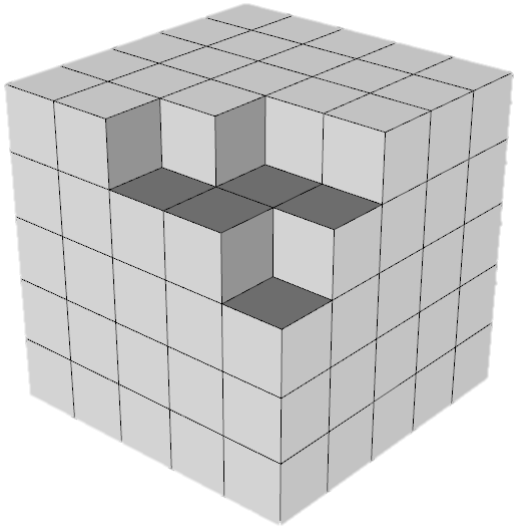


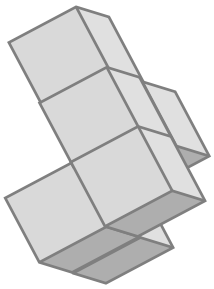
a.. _____

b. What percentage of the larger cube has been removed?

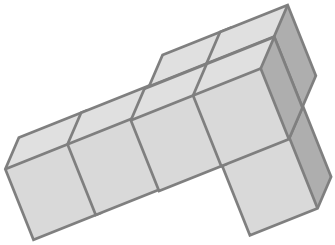
_____

5 Try to identify which of the models below represents most accurately the missing piece of the large cube shape to the right.

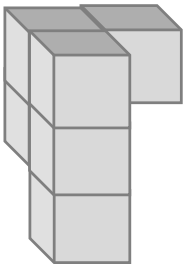




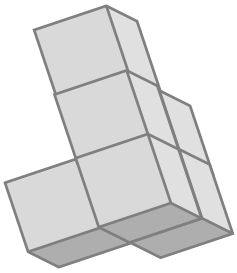
a



b

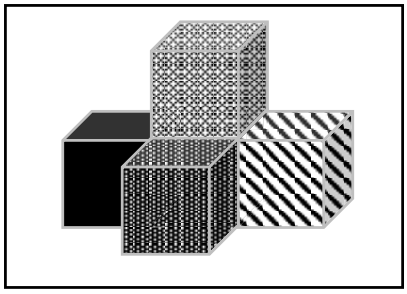


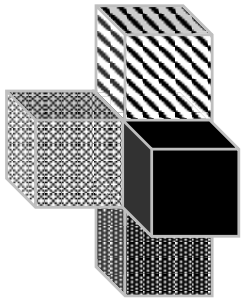
c



d

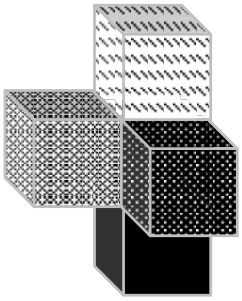
6 Try to identify which of the models below is exactly the same as the model to the right



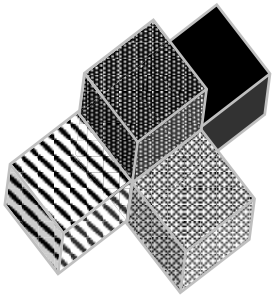


a

b

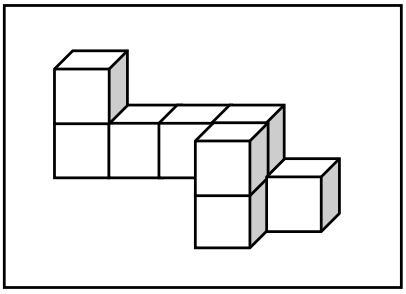


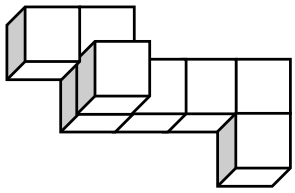
c



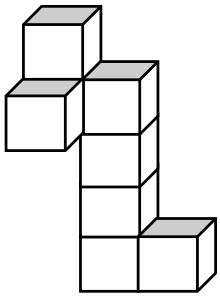
d

7 Try to identify which of the models below is exactly the same as the model to the right

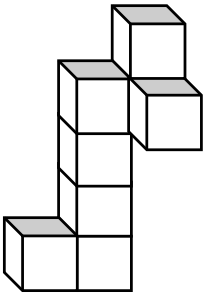




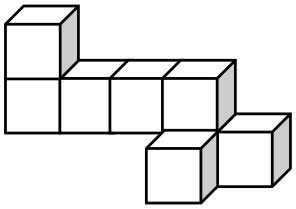
a



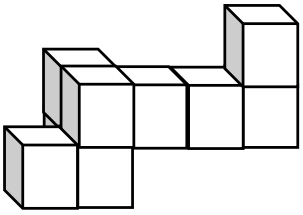
b



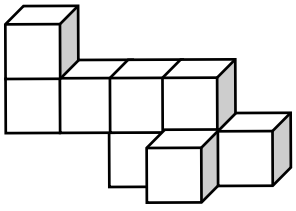
c



d

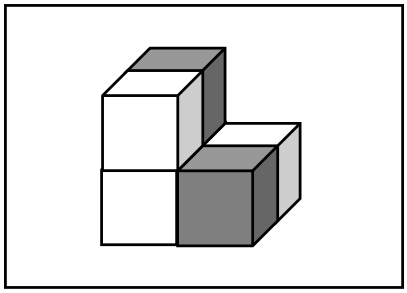


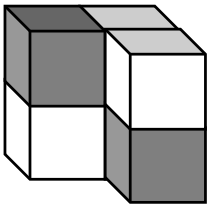
e



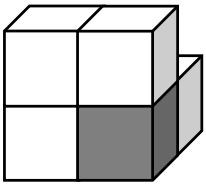
f

8 Try to identify which of the models below is **not the same** as the model to the right

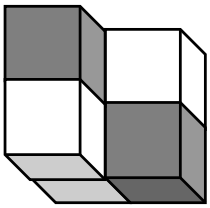




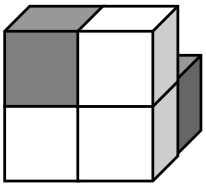
a



b

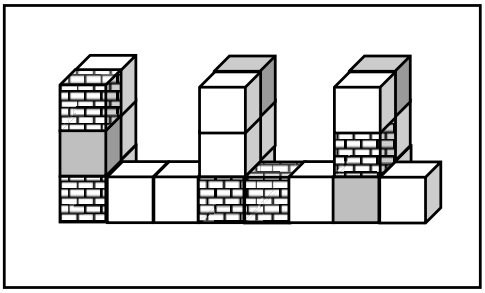


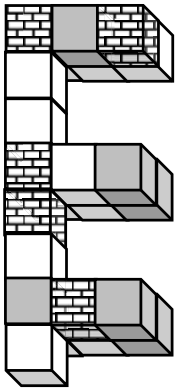
c



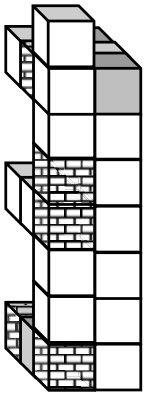
d

9 Try to identify which of the models below is exactly the same as the model to the right

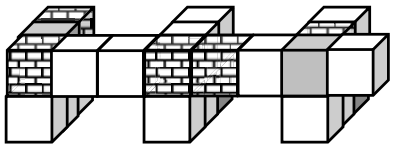




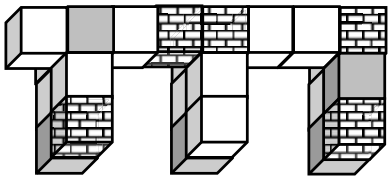
a



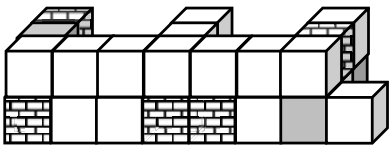
b



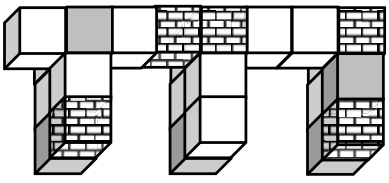
c



d



e



f