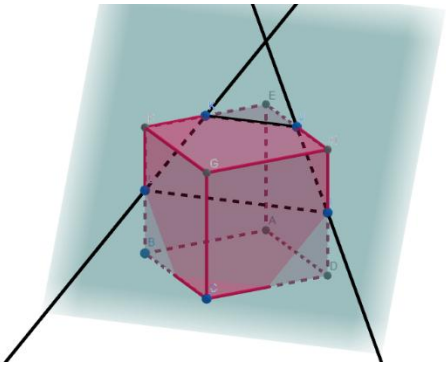
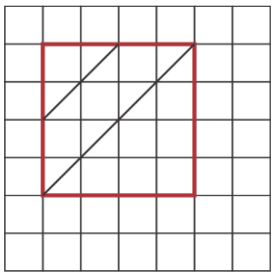
Classwork 23.

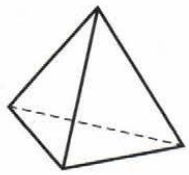




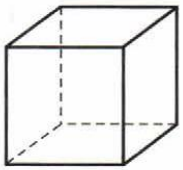
1. Fill the table:

Euler's formula for any convex polyhedra states that for any convex polyhedron, the number of vertices (V), edges (E), and faces (F) are related by the formula:

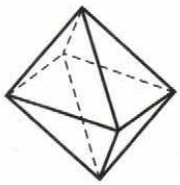
$$V - E + F = 2$$



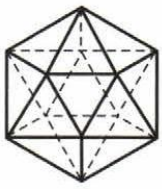
Tetrahedron



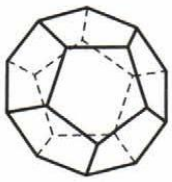
Cube (hexahedron)



Octahedron

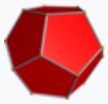


Icosahedron

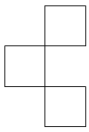


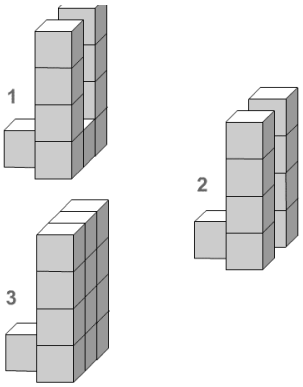
Dodecahedron

Name	**Image**	**Vertices** ***V***	**Edges** ***E***	**Faces** ***F***	**Euler characteristic:** $V - E + F$
Tetrahedron		4	6	4	**2**
Hexahedron or cube		8	12	6	**2**

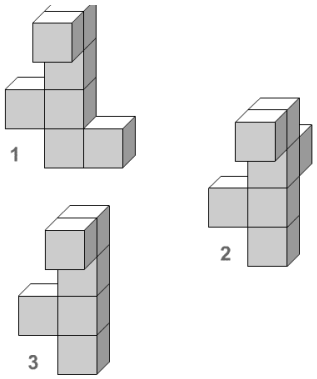
Octahedron		6	12	8	**2**
Dodecahedron		20	30	12	**2**
Icosahedron		12	30	20	**2**

Find the shape which has this top view

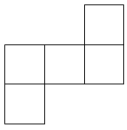


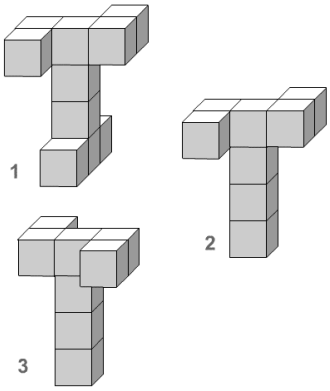


Find the shape which has this top view

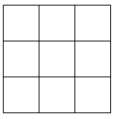


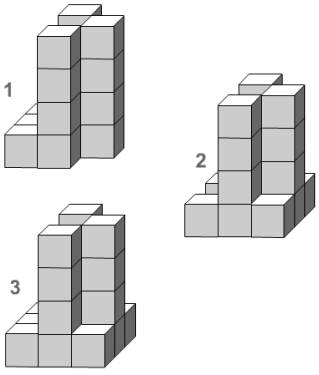
Find the shape which has this top view



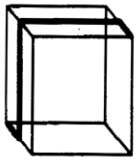


Find the shape which has this top view

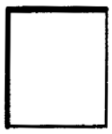




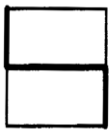
Thick wire placed on a glass cube.



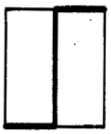
General



Front view

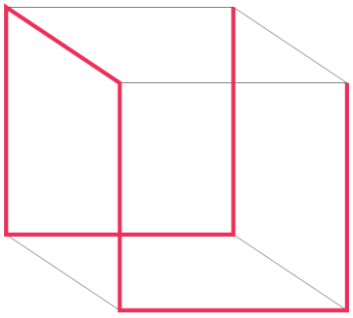


View from above



View from left

Draw all three views for these cubes:



Front Left Up