Student's Note - Projection diagrams II

This lesson has two parts - concept and problem.

- Concept session - 50 minutes
- End of Class Quiz - 10 minutes
- Problem Solving - 15 minutes

Concept - Projection diagrams II - 50 minutes

Shadow of tetrahedron:

Discussed if everyone is able to do the shadow of Tetrahedron, if not then do it once in Geogebra

Octahedron:

Basic discussion on octahedron.

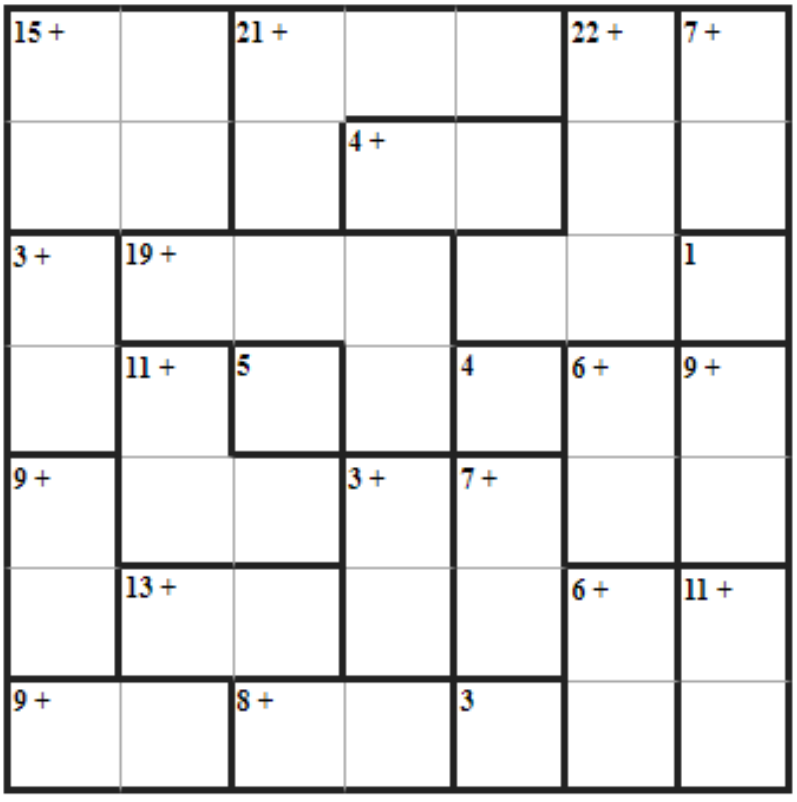
Draw Octahedron:

Draw an octahedron in Geogebra.

Projection of Octahedron:

Draw an Octahedron.
Draw a light bulb exactly on top of the octahedron at a distance.
Now remove the faces(octahedron skeleton).
Now check the shadow.

Activity - 10 minutes



Mixed Problems - 15 minutes

Problem 1:

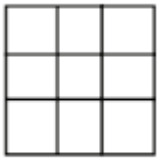
What is the sum of the digits in the arrangement at the right?

Problem 2:

Staci looks at the first and fourth pages of a chapter in her book. The sum of their page numbers is 47 . On what page does the chapter begin?

Problem 3:

The digits 1 through 9 are placed in the boxes shown, one per box. In each corner box is a prime number. In each box in the middle column is a square number. In the 3 boxes of the middle row is the least 3-digit number possible. What is that 3-digit number?



Problem 4:

Different letters represent different digits. AB is an even 2-digit number. EEE is a 3-digit number. Find the 2-digit number AB.

Problem 5:

A rectangular solid that is 4 cm by 6 cm by 8 cm is painted on all six faces. Then the solid is cut into cubes that measure 2 cm on each side. How many of these cubes have only one face painted?