Problem of the Week
Problem B and Solution
You Know My Name

Problem
You can create letters of the alphabet that look three-dimensional by using isometric dot paper. From such a 3-dimensional image, you can create a front, side, and top view using centimetre square paper.

On the other hand, one can reverse this process, and use the three views (side, top, and front) to create the corresponding 3-dimensional letter.

For example, the views shown at the right would lead to a 3-dimensional version of the letter L, shown below.

![Isometric Diagram of Letter L](image)

a) Use connecting cubes to create a 3-dimensional construction of the letter F. Then draw the three views (side, top, and front) on grid paper, and the 3-dimensional image on isometric dot paper.

b) Using isometric dot paper, draw your initials. Create a side, front, and top view of each letter on centimetre grid paper. Exchange your views with a partner and draw each other’s 3-dimensional images on isometric dot paper (or create a 3D version using connecting cubes).

Solution

a) See the diagrams on the next page for two possible 3-dimensional images on isometric dot paper and the three views of F on centimetre grid paper.

b) Answers will vary. The teacher may wish to display some of the isometric diagrams.
Two possible 3D views of F