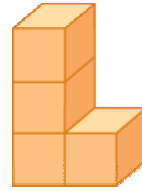


Lesson 10-6

Example 1

Make an orthogonal drawing of the figure.

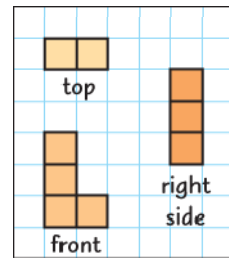


Solution

Draw the front view first.

Draw the top view above it. Make sure it has the same width as the front view.

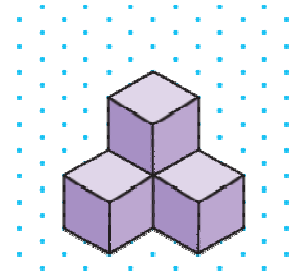
Draw the right-side view. Make sure it has the same height as the front view and the same depth as the top view.



Example 2

ART The isometric drawing shows the pedestal for an art exhibit.

- Make an orthogonal drawing of the pedestal showing the front, top, and right-side views.
- The length of one cube side is 1.5 ft. What is the surface area of the pedestal?



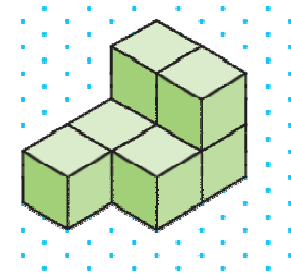
Solution

- Think of the pedestal as a combination of four cubes. Then make each view of the orthogonal drawing.
- There are 18 cube faces that comprise the surface area of the figure. Multiply this number by 2.25 to find the surface area in square feet.

$$2.25 \cdot 18 = 40.5 \text{ ft}^2$$

Example 3

Create a foundation drawing for the isometric drawing. Assume the drawing is viewed from the lower left-hand corner.

**Solution**

First draw the orthogonal top view of the figure. Then determine how many cubes belong in each section, and write the number to complete the foundation drawing.

2	2
1	1
1	