MULTIVIEW PROJECTIONS

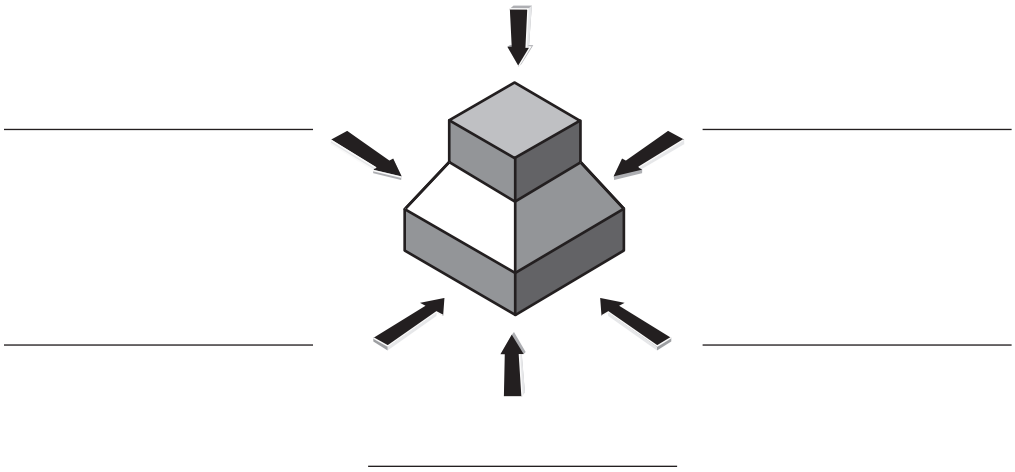
STUDENT BOOK | Chapter 11, page 346

GOAL

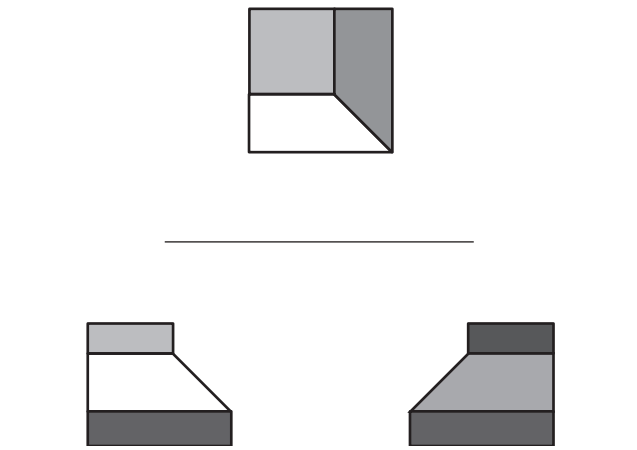
Reproduce an object in modelling clay from a multiview projection of the object.

OBSERVATION CRITERIA

1. Complete the illustration below by writing the names of the six conventional views of an object in the appropriate space.



2. The drawing below shows the three views generally illustrated in a multiview projection. Write the name of each of these views in its appropriate space.

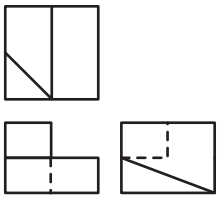


Name: _____ Group: _____ Date: _____

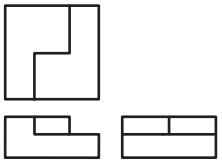
3. Match each multiview projection below to its corresponding perspective representation.

Multiview projection

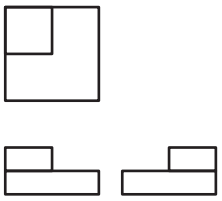
a.



b.

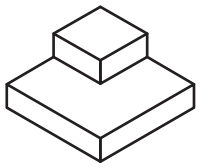


c.

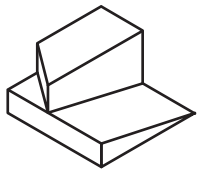


Perspective representation

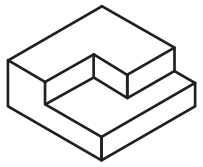
1.



2.



3.



4. Fill in the table below. It deals with the basic lines used in multiview projections.

Basic line	Name	Meaning
15		

Name: _____ Group: _____ Date: _____

MATERIALS

- block of modelling clay (100 mm × 60 mm × 40 mm)
- ruler
- retractable utility knife
- cutting mat
- 10-mm length of 10-mm Ø wooden dowel

PROCEDURE

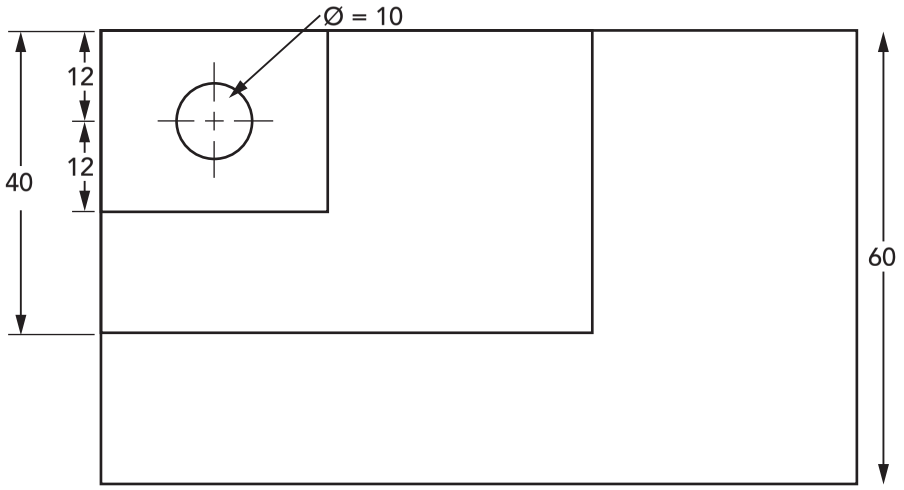
1. Of the three objects shown as multiview projections on pages 25–27, choose one to reproduce in three dimensions.
2. Lay a cutting mat on your work surface to protect it.
3. Study the multiview projection you chose and imagine what the actual object would look like. It may be helpful to draw the object in isometric projection.
4. Reproduce the object in modelling clay, respecting the dimensions provided by the dimensioning of the drawing.
5. When you have finished your object, compare it with your teacher's model. Make any needed adjustments.
6. Clean up and put away materials.

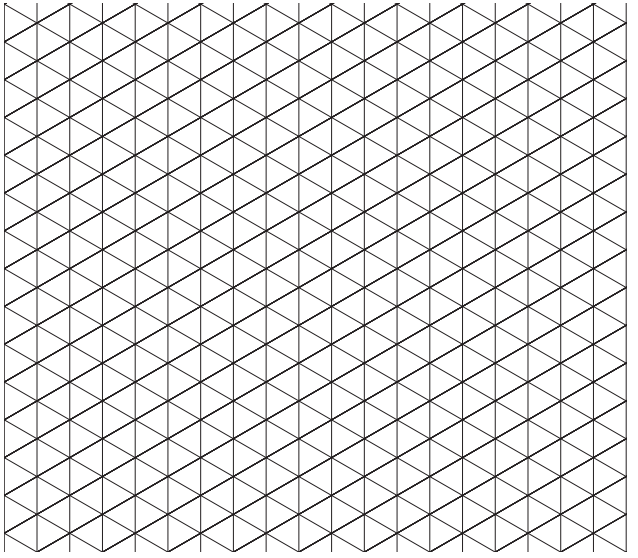
REFLECTING ON YOUR OBSERVATIONS

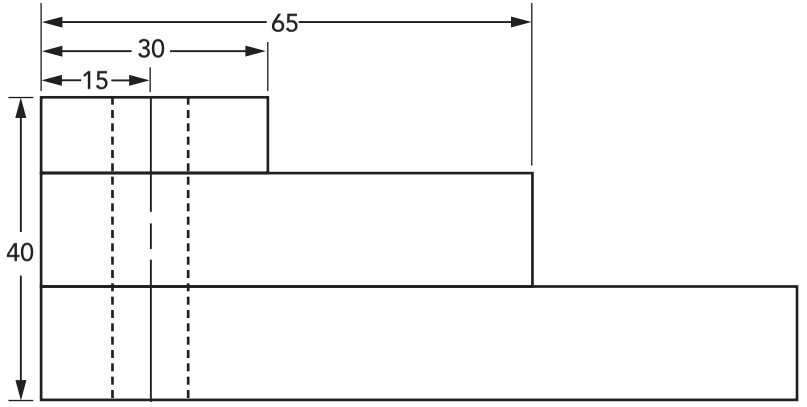
1. What did you find most difficult to do when creating this object?

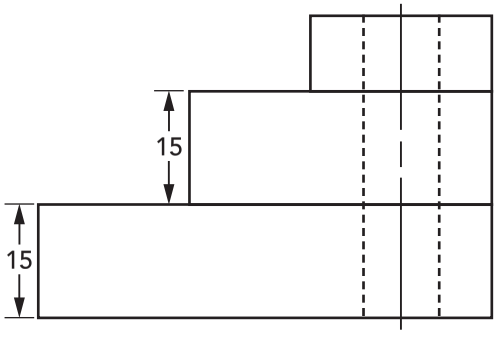
2. Was it easy to imagine a three-dimensional object based on a two-dimensional representation? Explain your answer.

3. An object is often illustrated both as an isometric projection and as a multiview projection. What is the advantage of illustrating the object in both these types of projections?

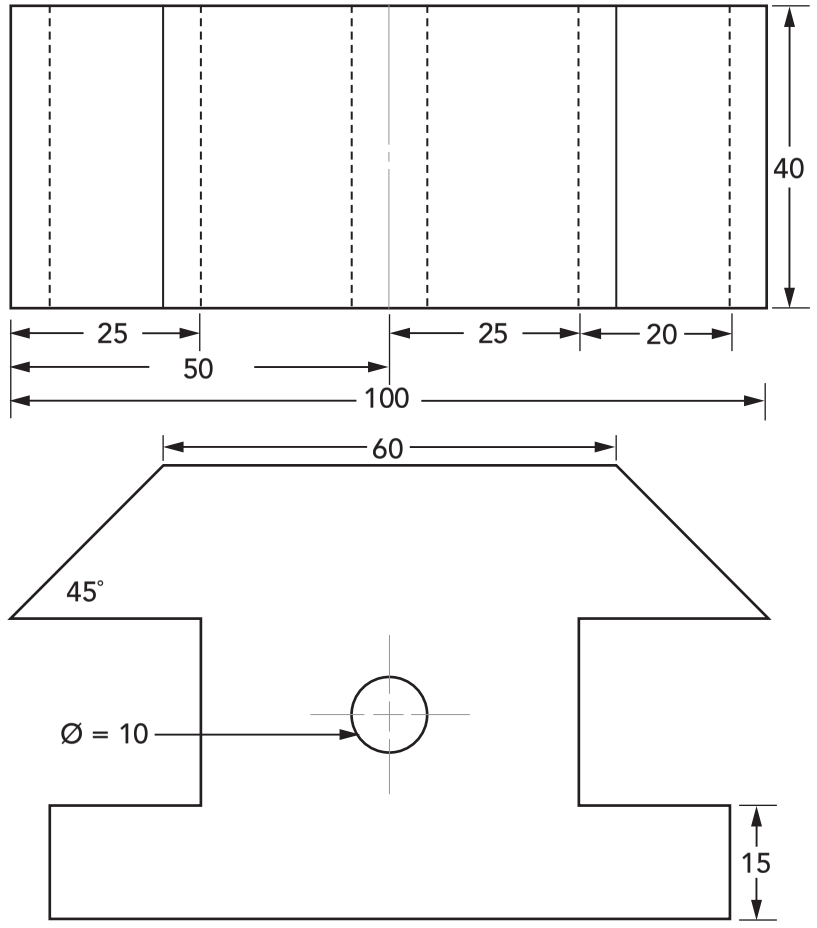


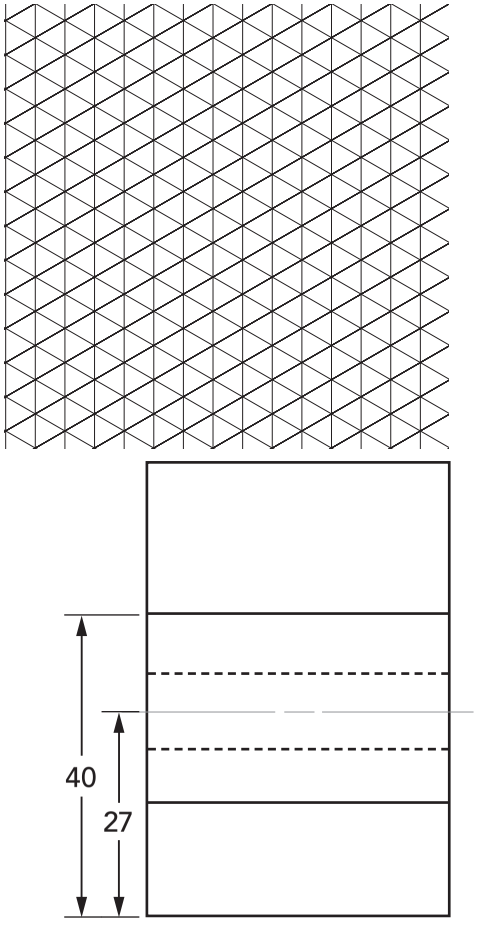




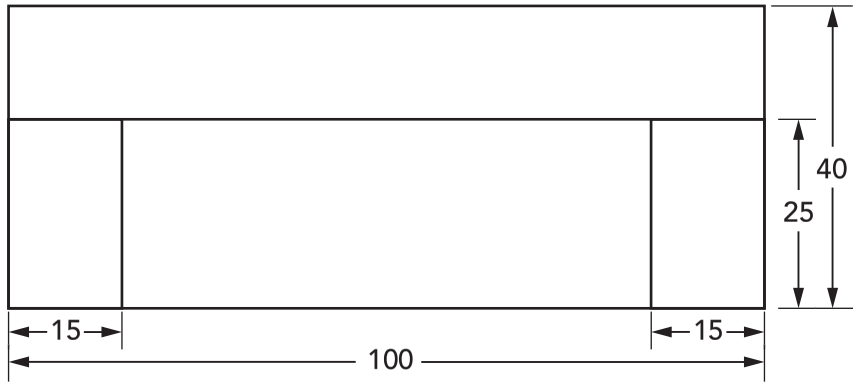


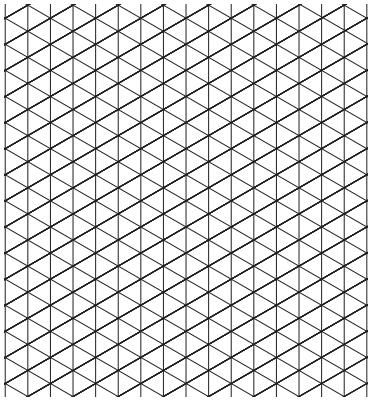
NAME:	DATE:
TITLE: MULTIVIEW PROJECTION OF OBJECT A	**SCALE:** 1:1

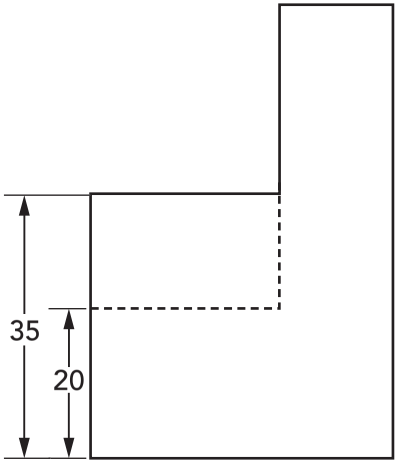




NAME:	DATE:
TITLE: MULTIVIEW PROJECTION OF OBJECT B	**SCALE:** 1:1







NAME:	DATE:
TITLE: MULTIVIEW PROJECTION OF OBJECT C	**SCALE:** 1:1