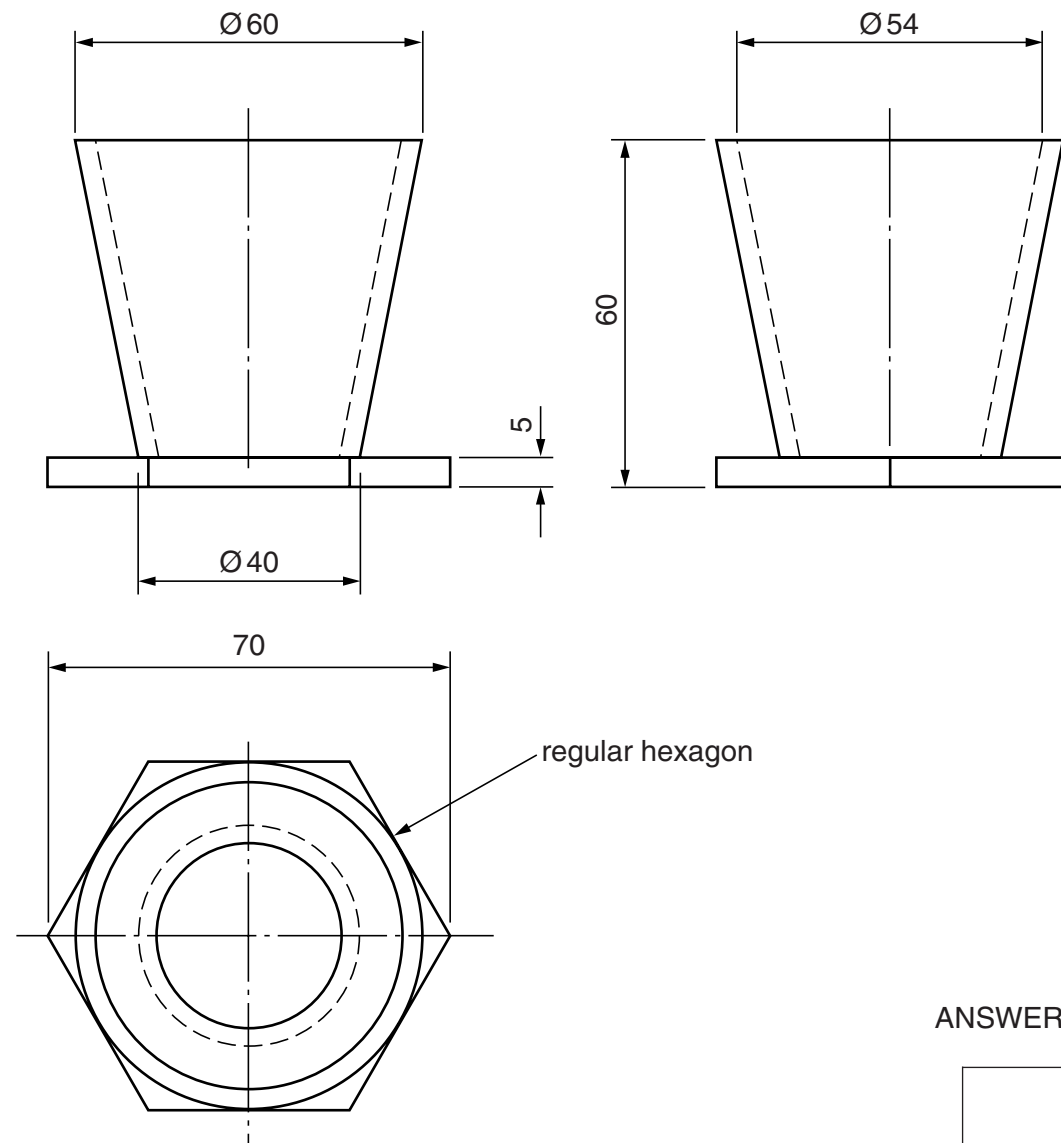


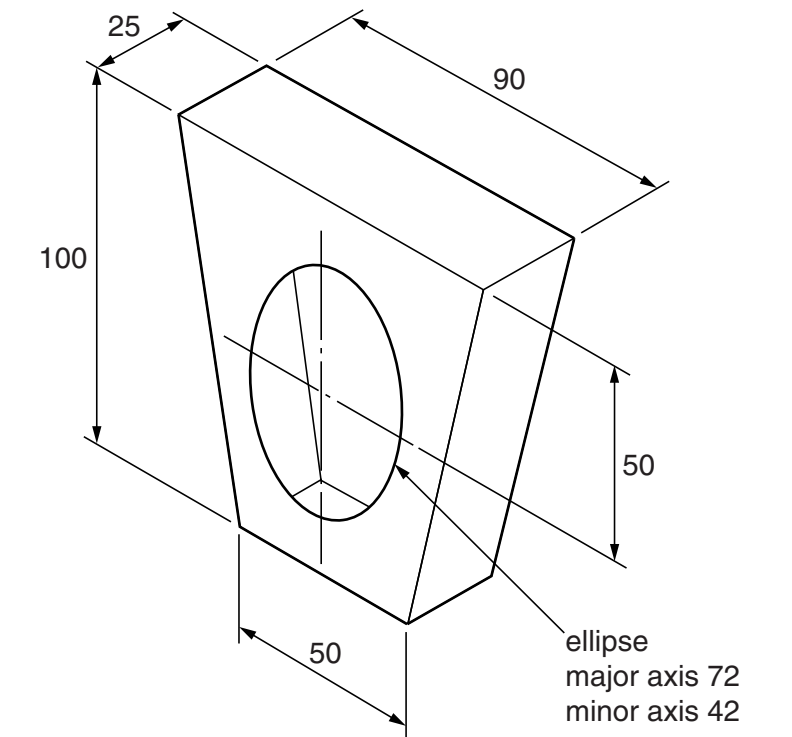
- 1** Orthographic views of a mug are given to the right. The mug is made from transparent material.
- (a) In the box provided, draw the symbol for the angle of projection used for the orthographic drawing. [3]
- (b) Draw a full size **isometric** view of the mug. [21]
- (c) Use pencil shading to show that the mug is made from transparent material. [6]



ANSWER (a) HERE

ANSWER (b) AND (c) HERE

- 2** A thin card package for handkerchiefs is shown in the pictorial view. There is an elliptical hole in the front of the package. The package opens at the top.
- Draw a full size, one-piece development of the package. Your drawing **must** include all gluing and other flaps and an accurate construction of the elliptical hole. [30]



3

A children's paddling pond with a triangular shelter is to be built in the corner of a public park as shown in Fig. 3(a).  
A plan view of the area is given in Fig. 3(b).

In the space below, use instruments to construct the plan view to a scale of 1:500.  
The gate has been drawn for you. [30]

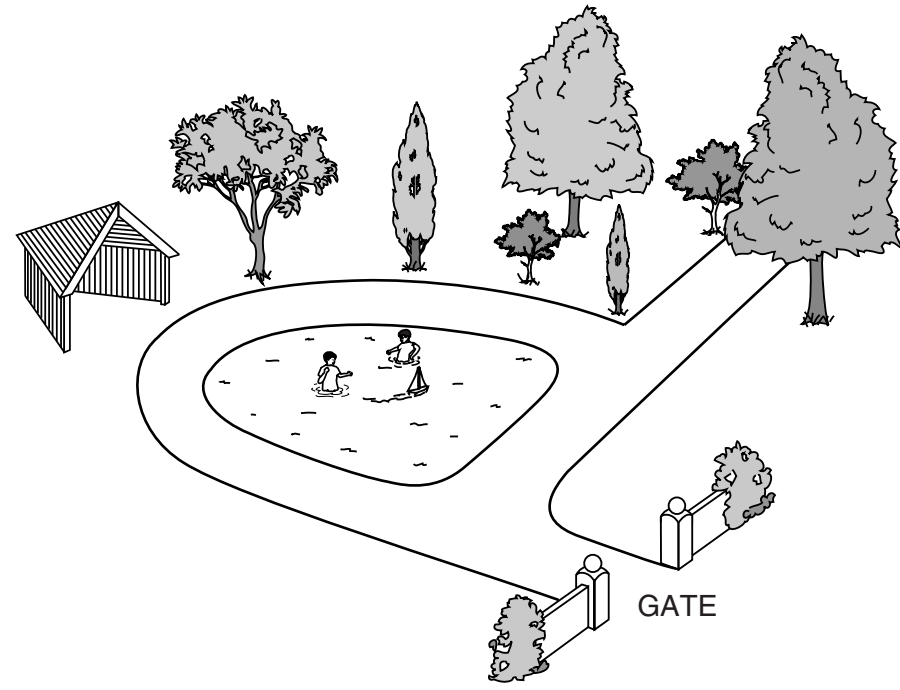


Fig. 3(a)

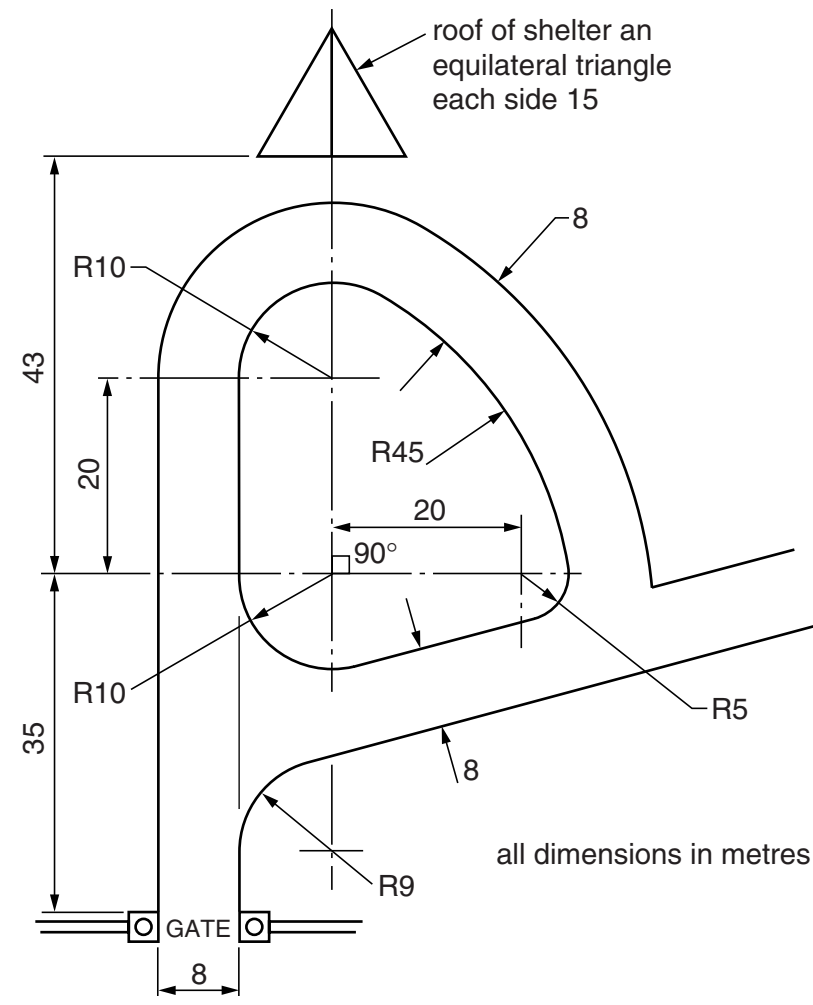


Fig. 3(b)



4

A notice board is needed for a sports park, directing people to areas for swimming, tennis and sailing.

As the notice board is to be read by people who speak a number of different languages, a symbol is needed to represent **each** activity.

The symbols must be:

- simple;
- easy to see from a distance;
- painted in black on a white background.

In the spaces indicated:

- (a) sketch freehand **two** ideas for each symbol; [15]  
(b) select your best ideas and then draw your chosen symbols in the appropriate squares on the view of the notice board below. [15]

ANSWER (a) HERE

ANSWER (b) HERE

