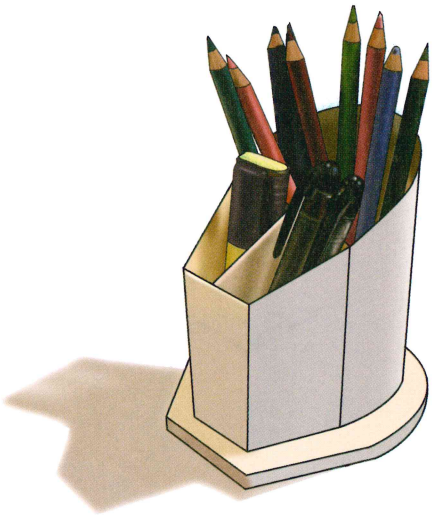
Exercises

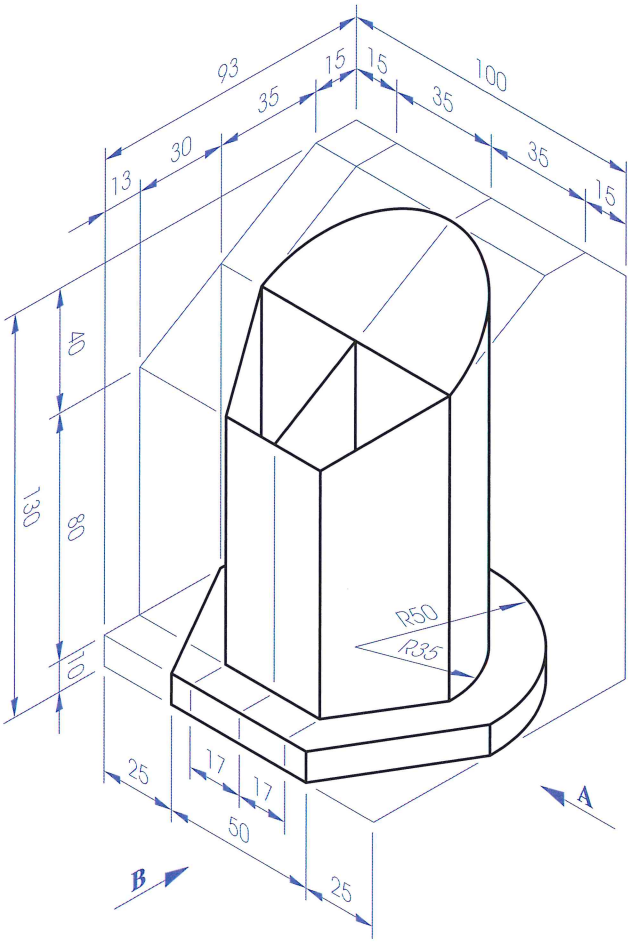
1. The figure over shows a pictorial view of a **desk-tidy**.

(a) Draw an **elevation** looking in the direction of arrow **A**.

(b) Draw an **end view** looking in the direction of arrow **B**.

(c) Draw a **plan** projected from (a) above.



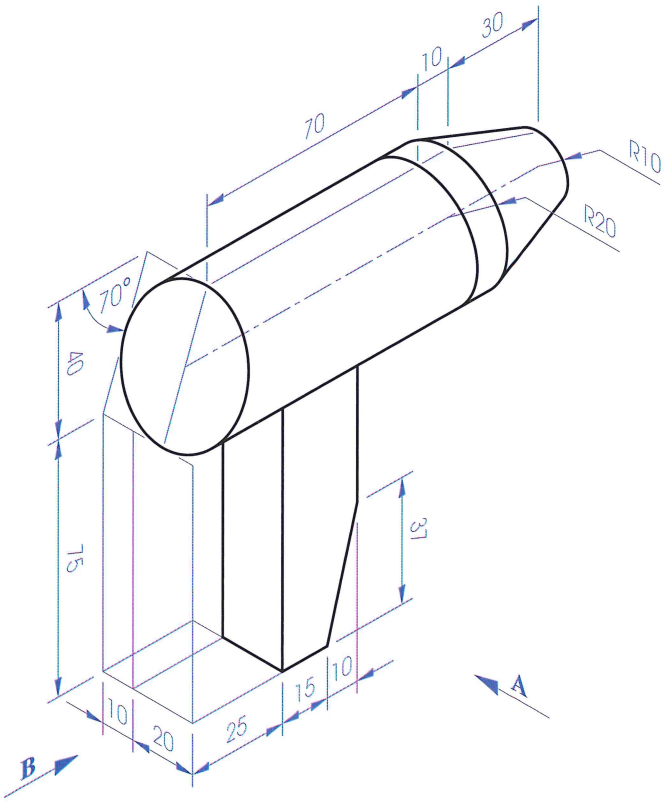


2. A pictorial view of a **hairdryer** is shown below.

(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.

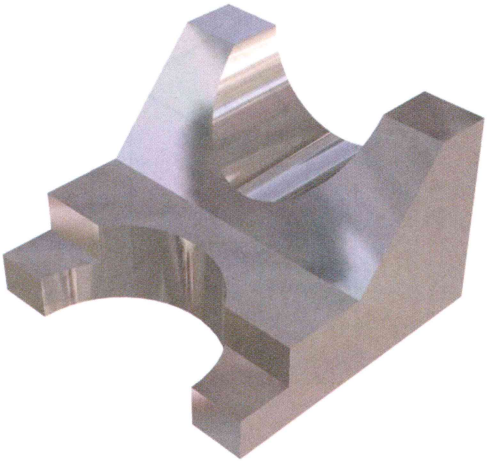


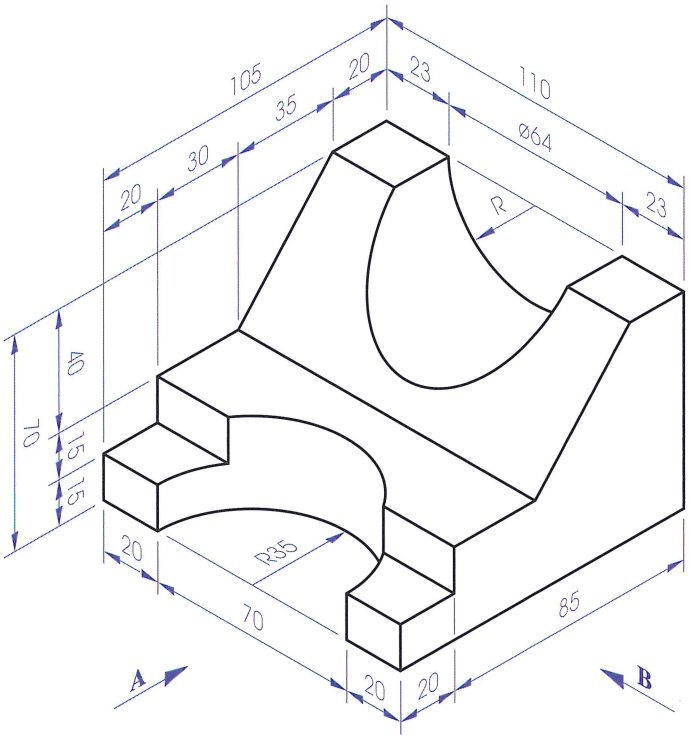
3. The figure over shows a pictorial view of a **solid**.

(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.



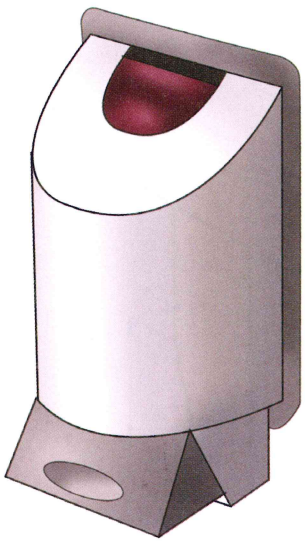


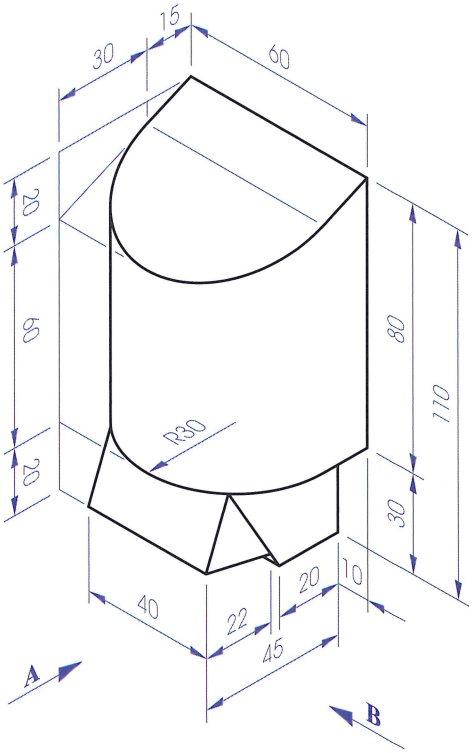
4. A pictorial view of a **hand wash dispenser** is shown over.

(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.





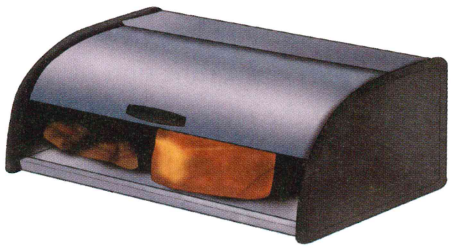
Example

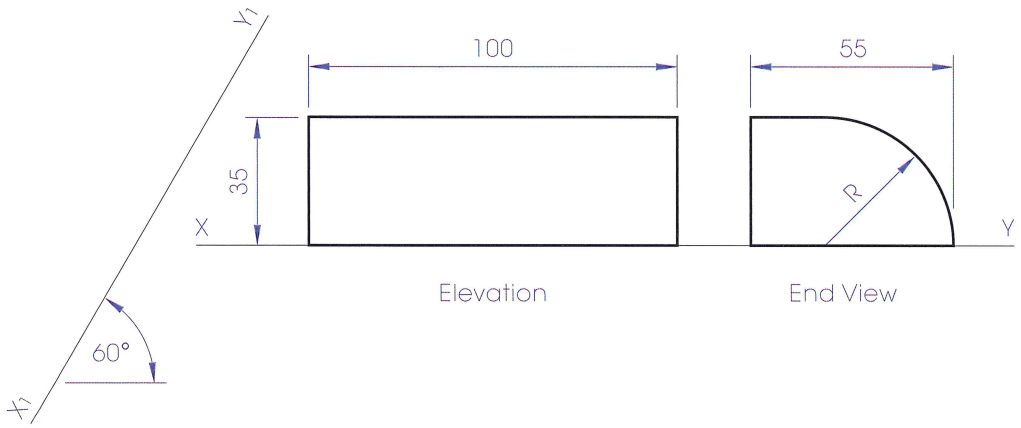
The elevation and end view of a **bread bin** are shown below. Also shown is the direction of a new ground line X_1Y_1.

(a) Draw the given views of the bread bin.

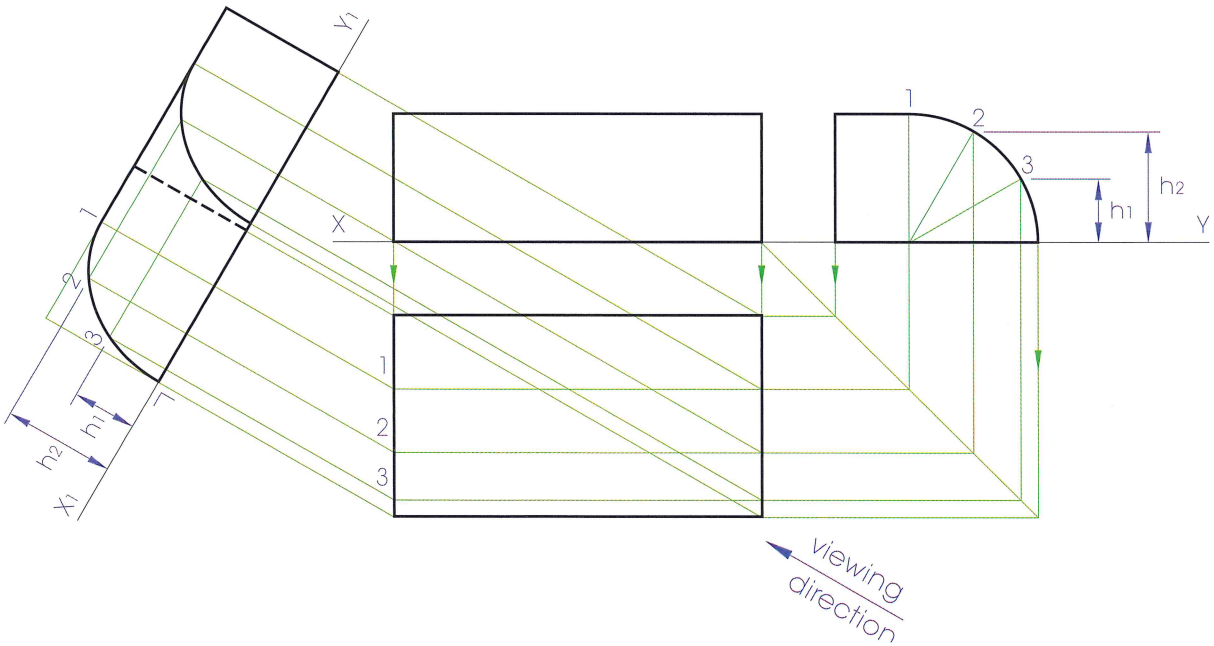
(b) Draw a **plan** projected from the elevation.

(c) Draw an **auxiliary elevation** of the bread bin on the ground line X_1Y_1.





1. The elevation, end view and plan are drawn as shown below.
2. Draw the ground line X_1Y_1 in any convenient position and project points on the object from the plan at right angles to this ground line.
3. Transfer the height of 35 mm from the front elevation and line in the auxiliary elevation omitting the curves.
4. Locate additional points such as 2 and 3 on the end view of the quadrants and project these points to the plan.
5. Project these points from the plan to the auxiliary elevation and locate them by transferring the heights h_1 and h_2 from the end view as indicated below.
6. Complete the auxiliary view as shown.



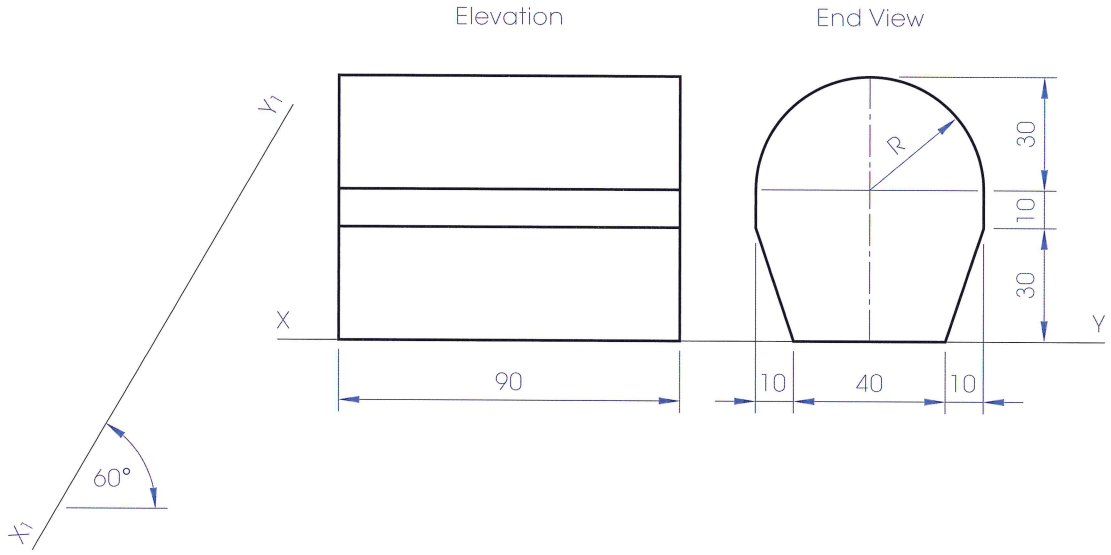
Exercises

1. The elevation and end view of a **treasure chest** are shown below. Also shown is the direction of a ground line X_1Y_1.

(a) Draw the given views of the treasure chest.

(b) Draw a **plan** projected from the elevation.

(c) Draw an **auxiliary elevation** of the treasure chest on the ground line X_1Y_1.



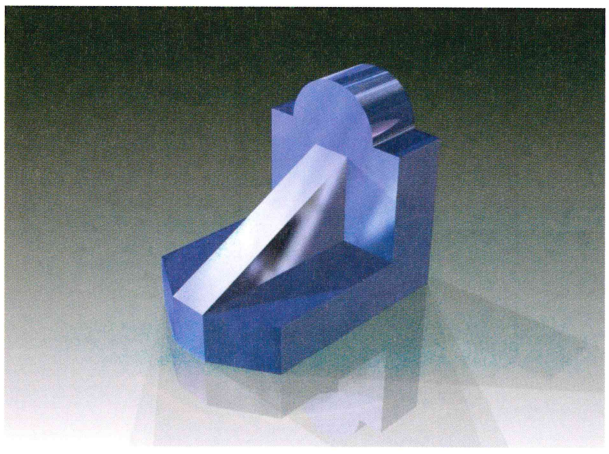
2. The figure over shows a pictorial view of a **solid**.

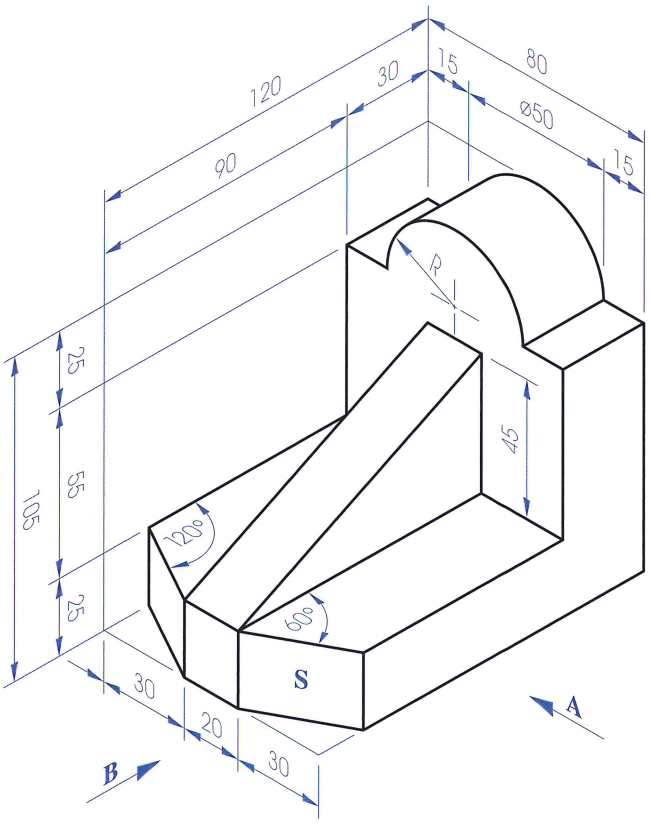
(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.

(d) Draw an **auxiliary elevation** of the *entire solid* which will show the true shape of the surface S.





Example

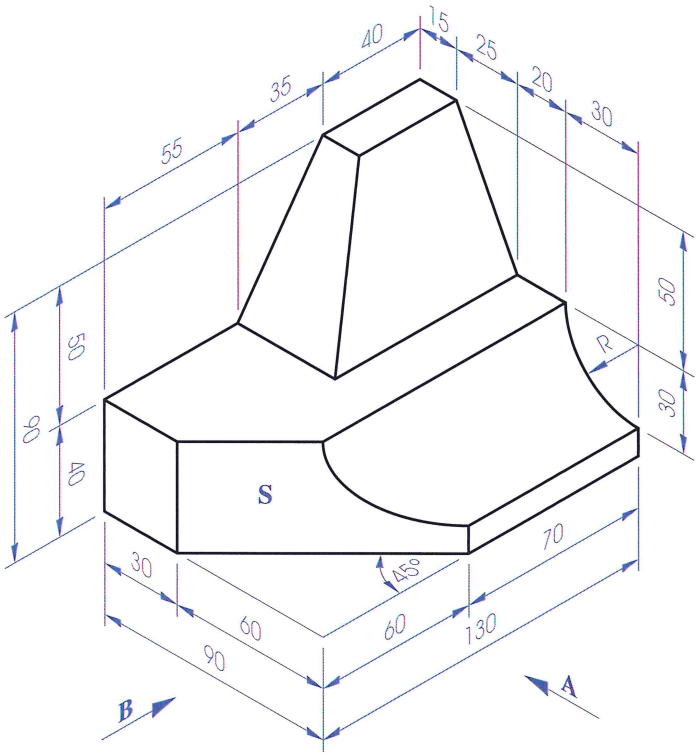
A pictorial view of a **solid** is shown over.

(a) Draw an **elevation** looking in the direction of the arrow **A**.

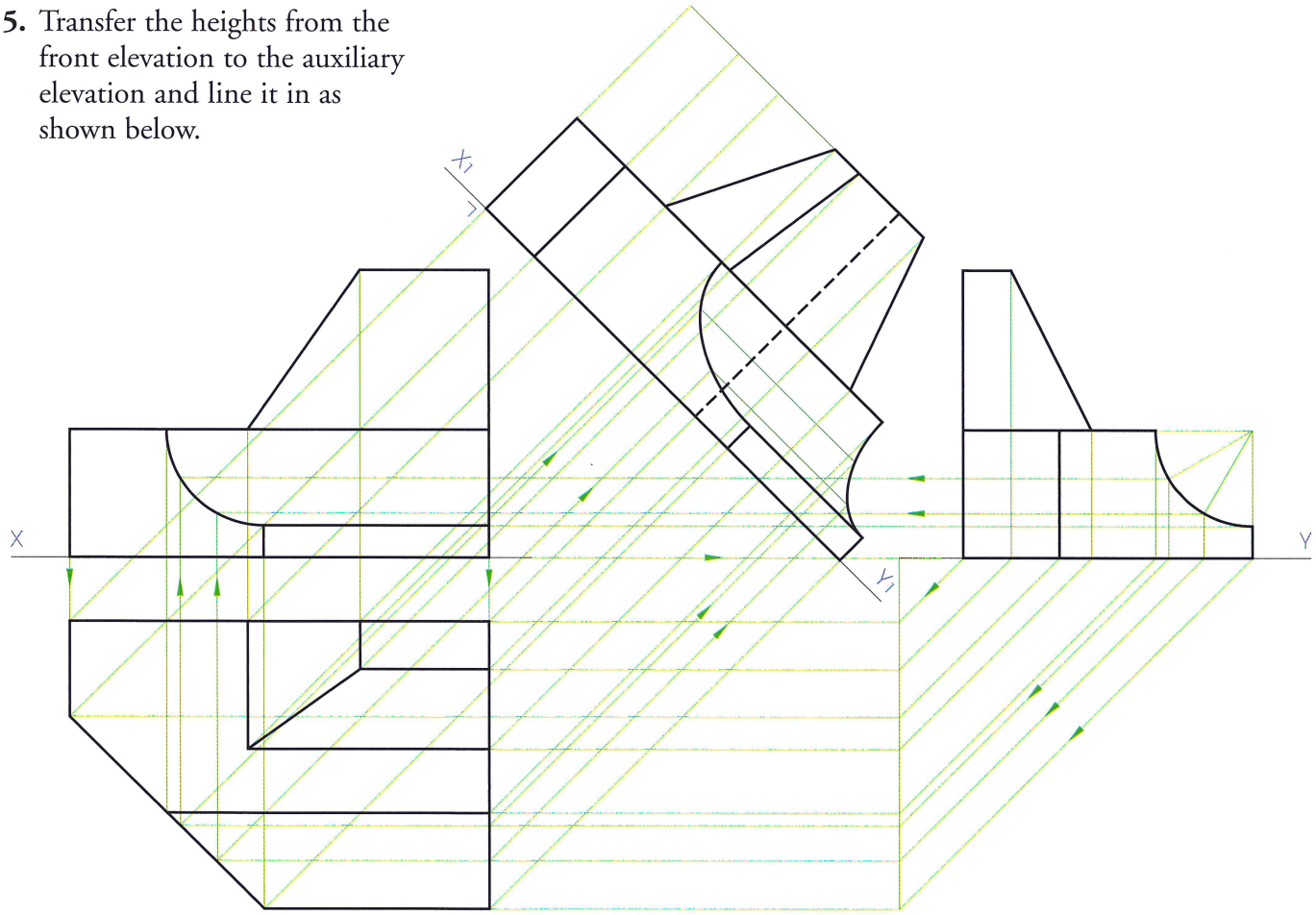
(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.

(d) Draw an **auxiliary elevation** of the *entire solid* which will show the true shape of the surface S.



1. The elevation (excluding the curve), end view and plan are drawn in the normal manner.
2. Surface **S** appears as an edge (line) in plan. Therefore points on the curved line on surface **S** can be projected from the end view to meet this edge to locate them in plan.
3. These points can be located in elevation by projecting them from the plan and end view as shown below. Draw a smooth curve to pass through them to complete the elevation.
4. Draw the X_1Y_1 line parallel to the plan of surface **S**. Project points on the object from the plan at right angles to the new ground line.
5. Transfer the heights from the front elevation to the auxiliary elevation and line it in as shown below.



Exercises

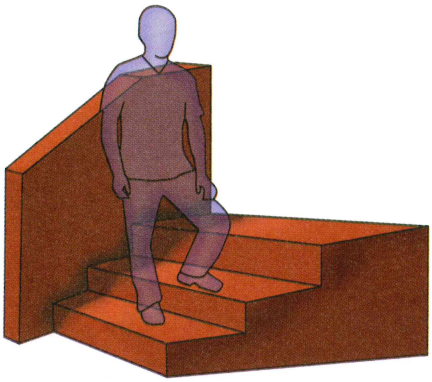
1. A pictorial view of a **flight of steps** is shown over.

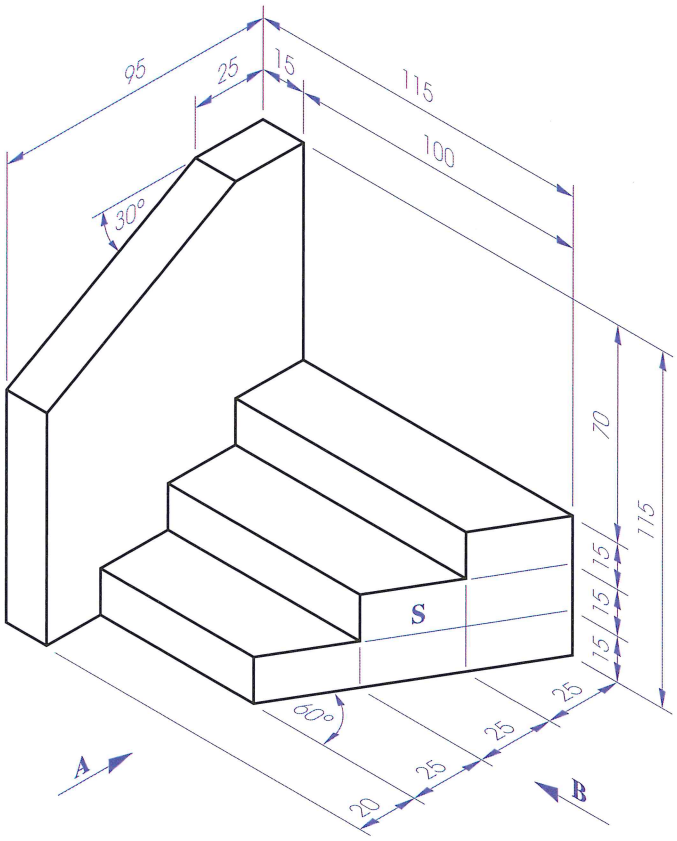
(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.

(d) Draw an **auxiliary elevation** of the *entire solid* which will show the true shape of the surface S.





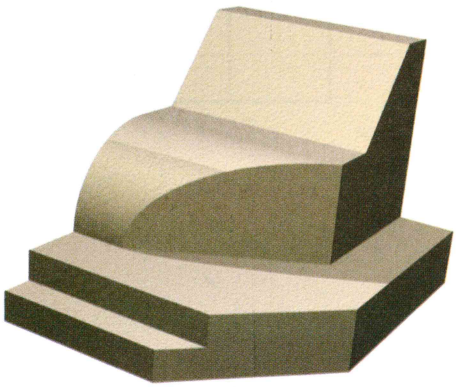
The figure over shows a pictorial view of a **solid**.

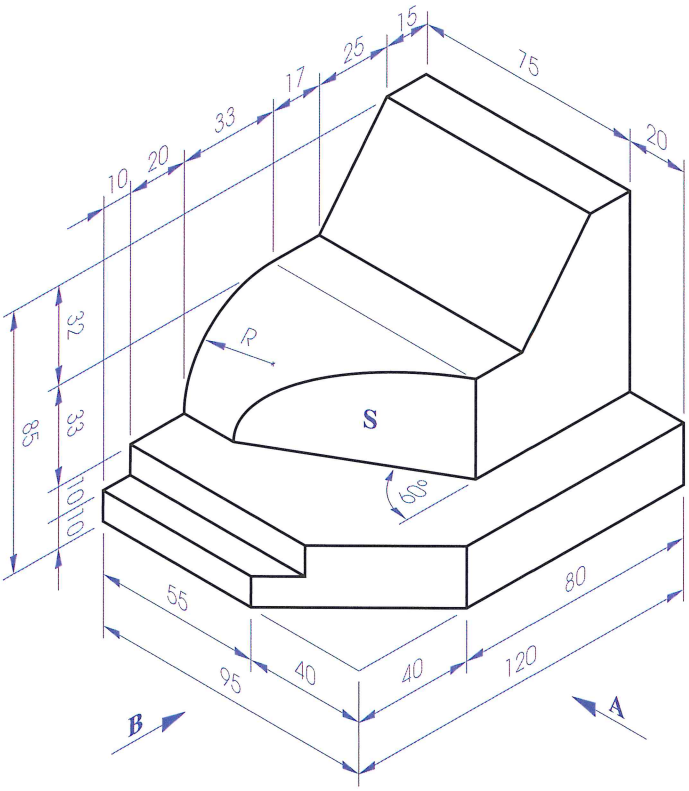
(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.

(d) Draw an **auxiliary elevation** of the *entire solid* which will show the true shape of the surface S.





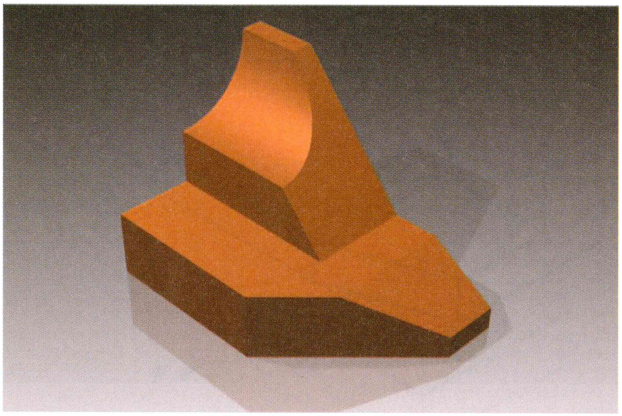
3. A pictorial view of a **solid** is shown below. A photo-realistic image of the solid is also shown.

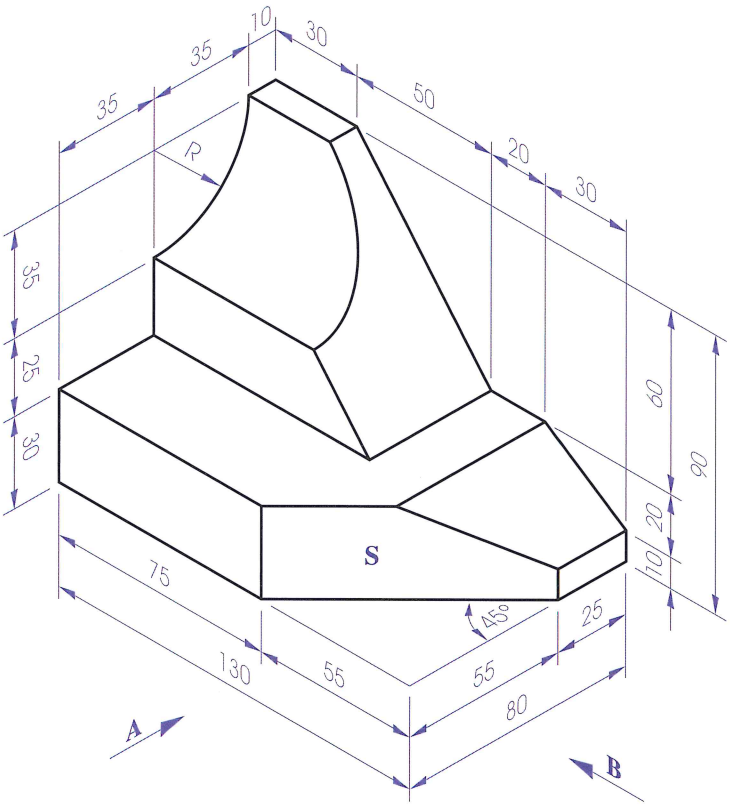
(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.

(d) Draw an **auxiliary elevation** of the *entire solid* which will show the true shape of the surface S.





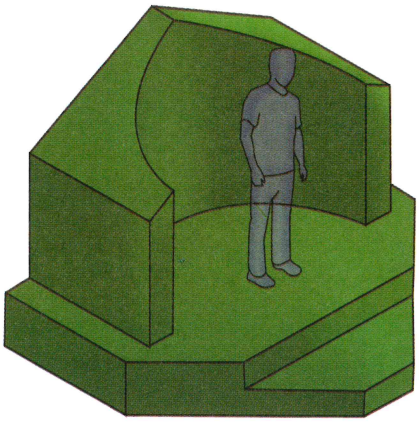
4. The figure over shows a pictorial view of a **structure**. Each step is of *equal height.*

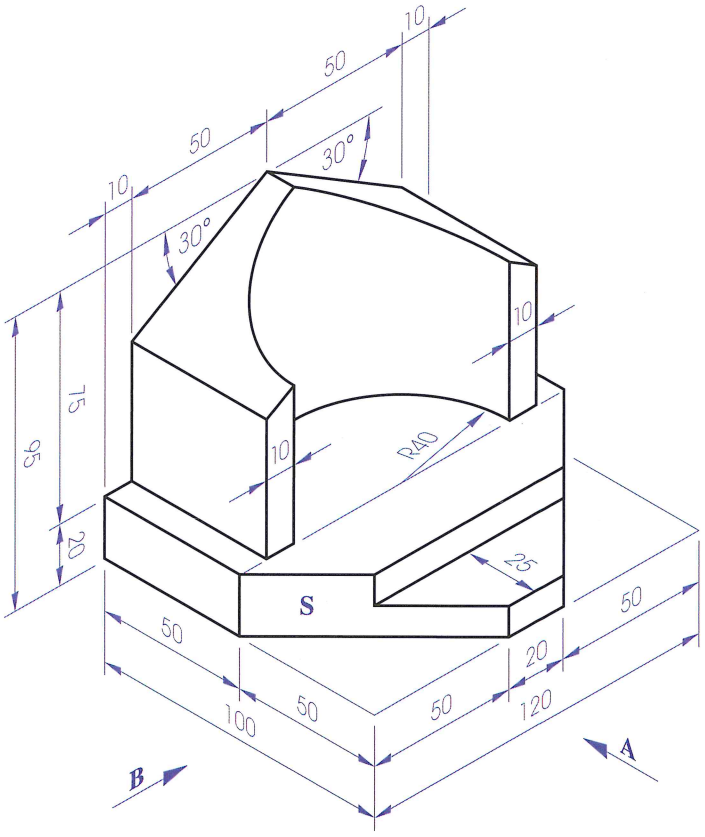
(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.

(d) Draw an **auxiliary elevation** of the *surface S* which will show its true shape.



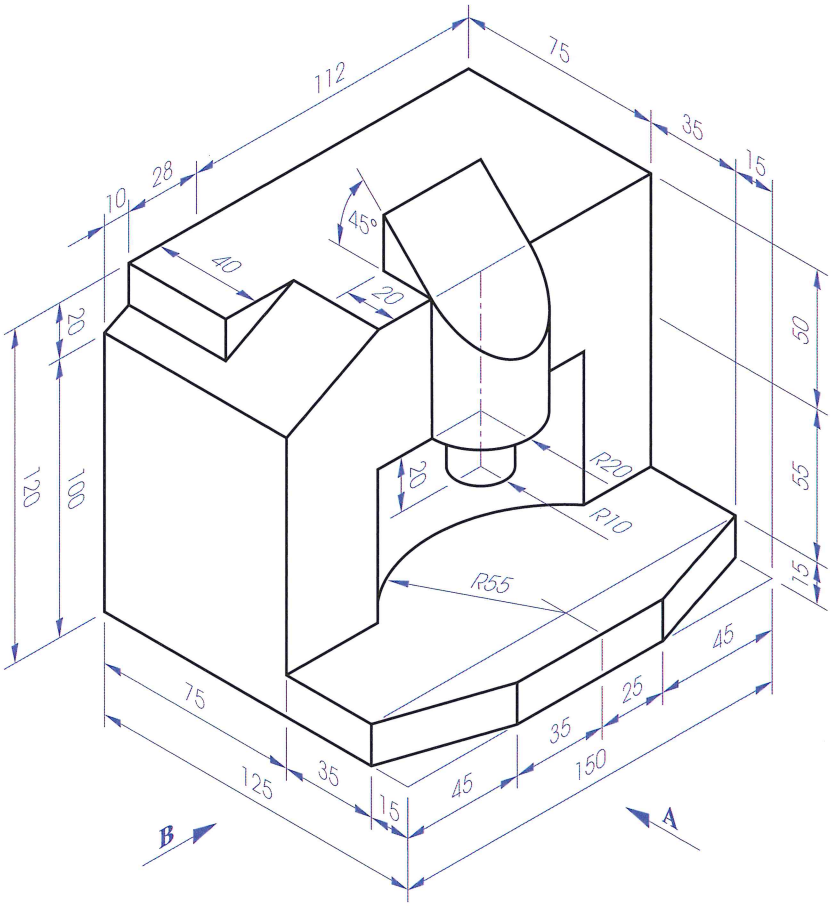


5. A pictorial view of a **coffee machine** is shown over.

(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.



6. The figure below shows a pictorial view of a **solid**. A photo-realistic image of the solid is also shown.

(a) Draw an **elevation** looking in the direction of the arrow **A**.

(b) Draw an **end view** looking in the direction of the arrow **B**.

(c) Draw a **plan** projected from (a) above.

(d) Draw an **auxiliary elevation** of the *surface S* which will show its true shape.