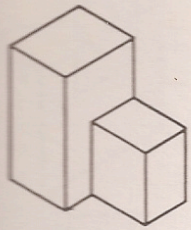
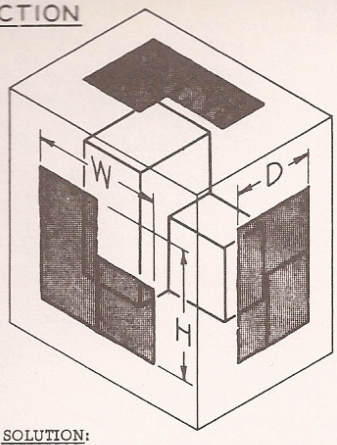
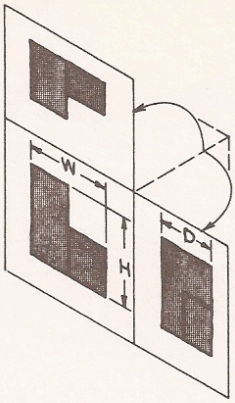
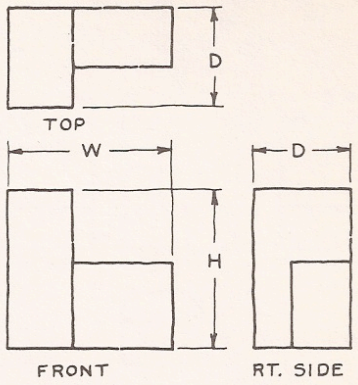
ORTHOGRAPHIC PROJECTION









SOLUTION:

PROBLEM: DRAW THREE ORTHOGRAPHIC VIEWS OF THE OBJECT ABOVE.

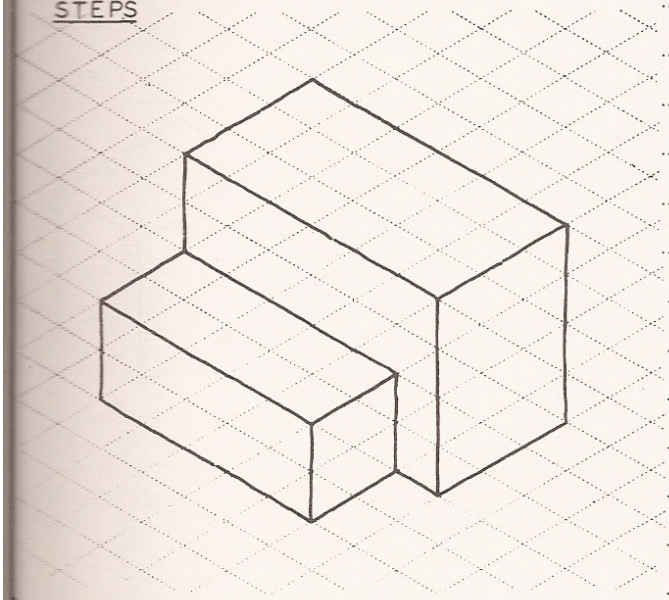
STEP 1: ORTHOGRAPHIC PROJECTION IS THE ENGINEER'S METHOD OF DRAWING THREE DIMENSIONAL OBJECTS ON A TWO DIMENSIONAL SURFACE. THIS CAN BE VISUALIZED BY IMAGINING THE OBJECT IS INSIDE A GLASS BOX AND THE VIEWS ARE PROJECTED PERPENDICULARLY ONTO THE PLANES OF THE BOX.

STEP 2: NOTE THAT EACH DIMENSION (HEIGHT, WIDTH AND DEPTH) ARE COMMON TO TWO VIEWS. IMAGINE THAT THE PLANES OF THE BOX ARE OPENED INTO ONE PLANE AS SHOWN ABOVE. THIS IS THE POSITION OF THE VIEWS IN ORTHOGRAPHIC PROJECTION.

STEP 3: THE THREE VIEWS ABOVE ARE THE RESULT OF ORTHOGRAPHIC PROJECTION. NOTE THAT THE TOP VIEW IS LOGICALLY PLACED OVER THE FRONT VIEW, AND THE RIGHT SIDE VIEW IS PLACED TO THE RIGHT OF THE FRONT VIEW.

1. SKETCH THREE ORTHOGRAPHIC VIEWS OF THE PARTS IN THE SPACE AT THE RIGHT.

STEPS



2. JAM