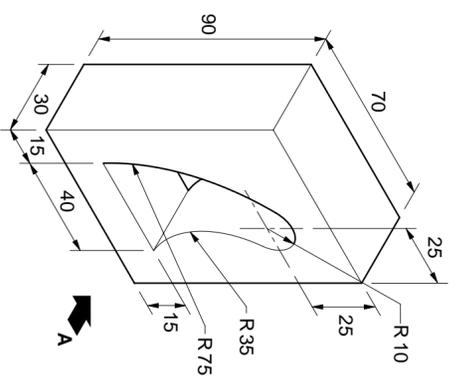




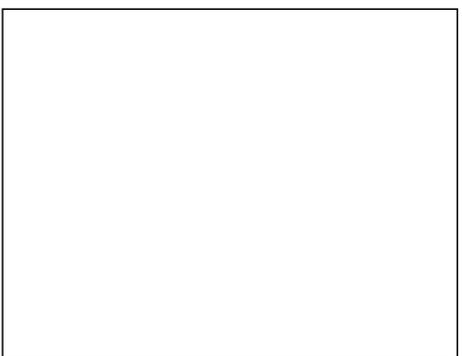
A package is needed for a piece of delicate glassware. The package is to consist of a block of expanded polystyrene with a hole into which the glassware fits, contained in a box made from thin card. The polystyrene block must fit tightly in the box.  
A sketch of the polystyrene block is given to the right.



- In the positions indicated:
- (a) complete the front view of the polystyrene block looking in the direction of the arrow A. [11]
  - (b) Geometrical constructions must be used for the outline of the hole; draw, full size, a one piece development of the box. [19]
- Include in the development:
- (i) all gluing and other flaps;
  - (ii) a regular octagonal hole, centrally placed in the front of the container through which the glassware can be seen. The octagon is to be 60mm across the flats. [19]

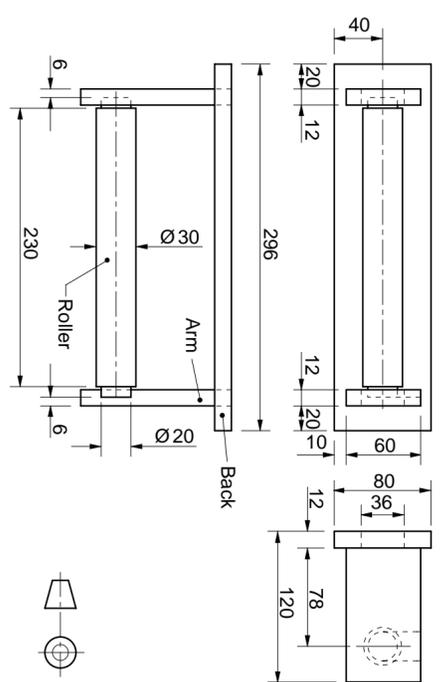
ANSWER PART (b) IN THE SPACE BELOW

ANSWER PART (a) HERE  
Construct the outline of the hole correctly positioned in the front view A of the polystyrene block below.



An idea for a wooden kitchen-roll holder is shown in the orthographic views to the right.  
In the positions indicated:

- (a) sketch modifications to the given shape of the parts of the kitchen-roll holder that would make it easier to use and more attractive to look at; [4]
- (b) (i) draw **freehand**, approximately half full size, an **exploded pictorial** view of the kitchen-roll holder showing how the parts are assembled. Include your chosen modifications for (a) in your drawing; [22]
- (ii) use colour and shading to show that the kitchen-roll holder is made from wood. [4]



ANSWER PART (a) HERE

ANSWER PART (b)(i) AND (ii) HERE