

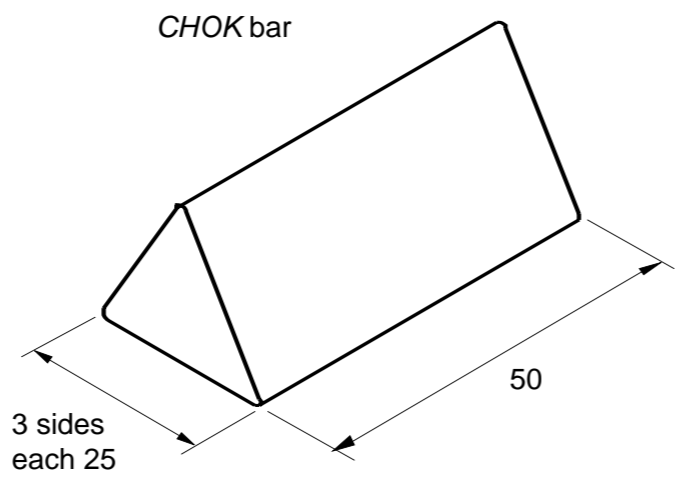
- 1 A package is needed for the new chocolate bar called *CHOK* shown to the right. The package is to:
- hold **six** bars of chocolate;
 - be made from one piece of thin card;
 - have a lid, which when opened, allows one bar of chocolate to be taken out at a time;
 - be economical in the use of card.

In the spaces indicated:

- (a) draw at least **two** ideas for the package; [7]
- (b) using instruments, draw a full size development of your chosen design for the outside of the package; [14]
- (c) using colour and/or shading, decorate your development of the package. You need not decorate the whole of the package, but it must be clear from your answer what the package will look like. [9]

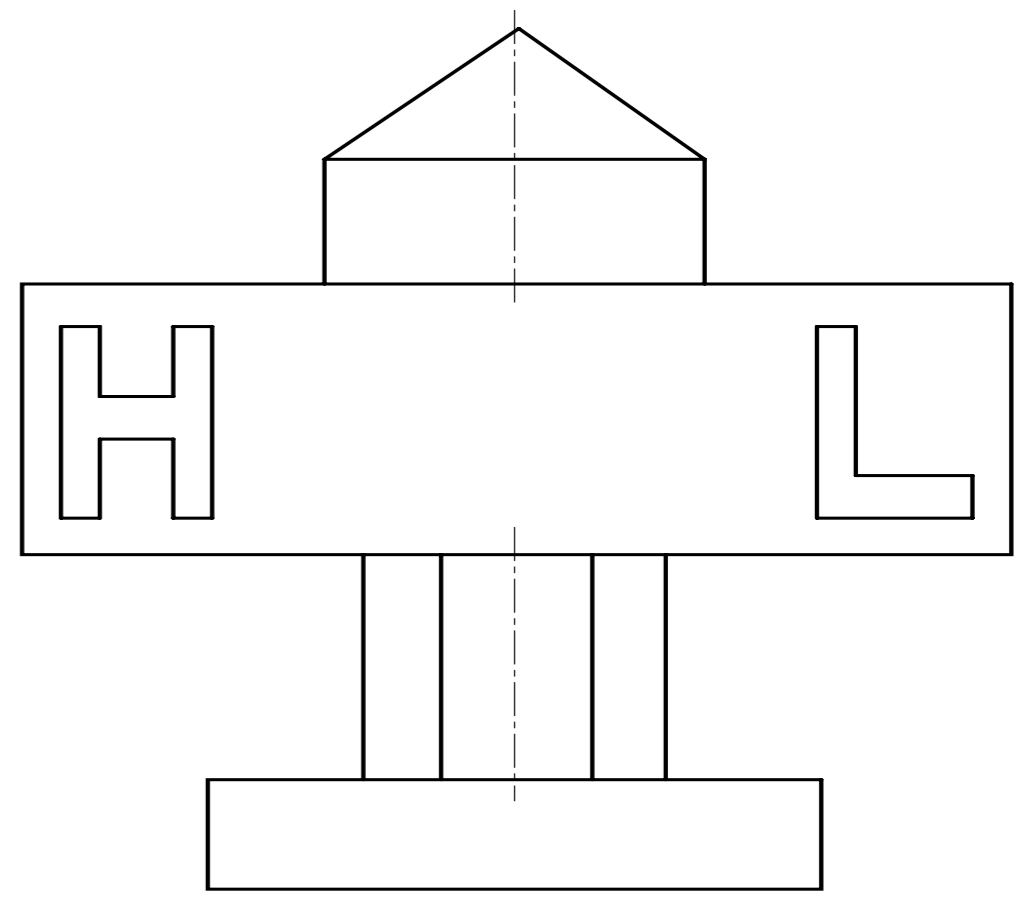
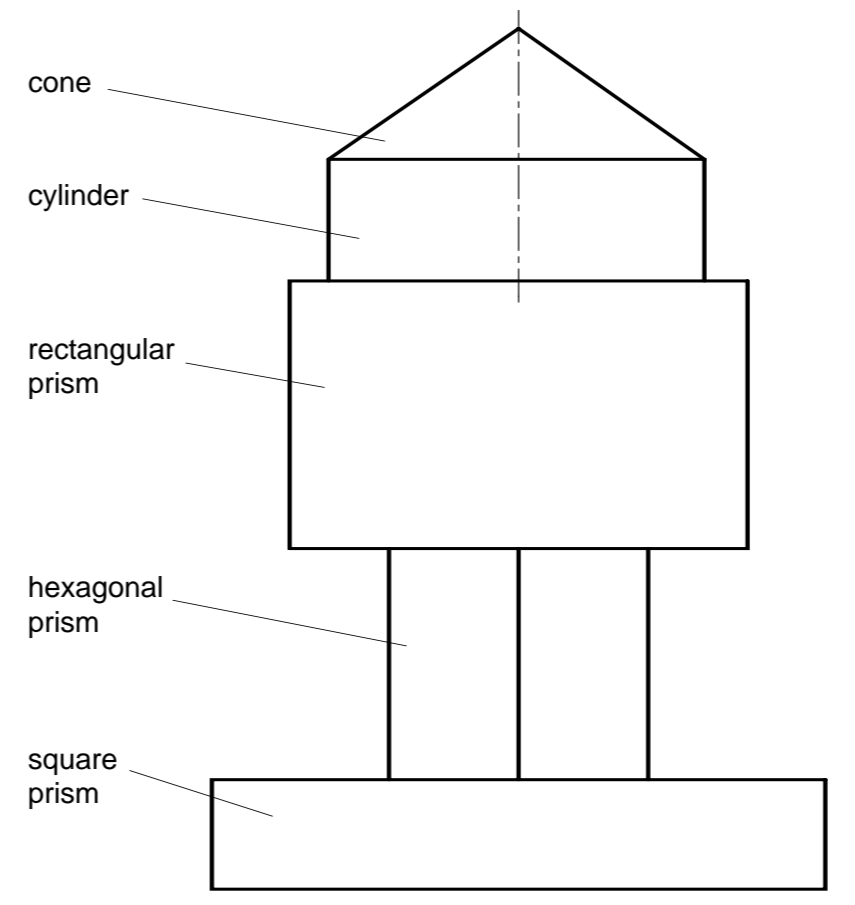
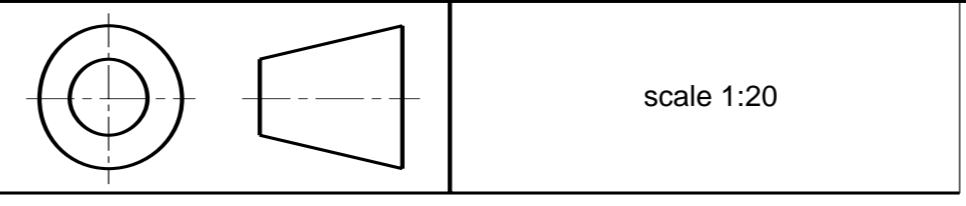
ANSWER (a) HERE

ANSWER (b) AND (c) HERE



- 2 Third angle orthographic views of a concrete sign for a hotel are given below. The word *HOTEL* is painted on the front of the sign.

- (a) Complete the word *HOTEL* on the given front view, using a similar style of letters as the **H** and **L**. [7]
- (b) Project a plan view of the sign above the given front view. Show all hidden detail. [15]
- (c) Fully dimension the orthographic drawings. [8]



3 A box is needed to hold the eight differently shaped biscuits shown to the right. The biscuits are to fit tightly in recesses in a vacuum formed insert in the box. The outline of the insert is given below.

In the positions indicated:

(a) sketch ideas for a suitable layout for the insert. [5]

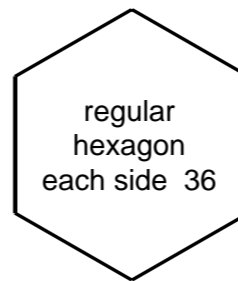
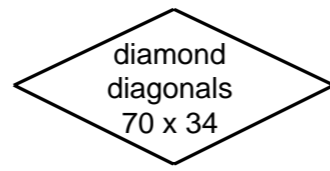
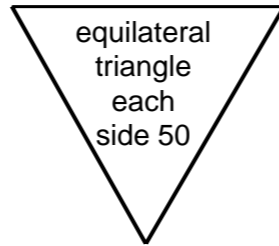
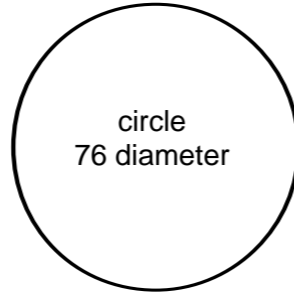
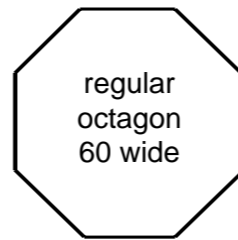
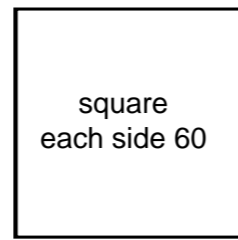
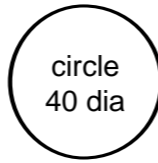
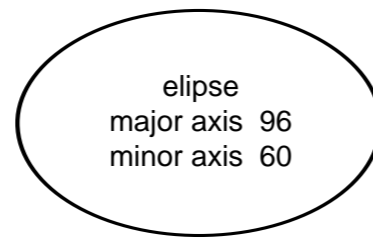
Note:

The elliptical recess must be in the centre of the insert.
There must be a space of at least 8 mm. between each recess and between the recesses and the edges of the insert.

(b) draw accurately your chosen design for the layout of the recesses. [25]

ANSWER (a) HERE

ANSWER (b) HERE



4 Three concrete pots A, B and C are shown in the orthographic views to the right. Trees and shrubs are to be planted in an arrangement of the three pots.

(a) The geometrical name of pot A is square prism. Give the geometrical name of:

(i) pot B [2]

(ii) pot C [1]

(b) In the space indicated, complete a scale 1:10 plan view of an arrangement of the three pots. Arrange the pots so that each pot is on the ground and touches the other two. The plan of pot A is given. [10]

(c) In the space indicated, sketch freehand in good proportion, a pictorial view of your chosen arrangement of the three pots as shown in (b). Pot A is to be at the front. [17]

ANSWER (b) HERE

ANSWER (c) HERE

