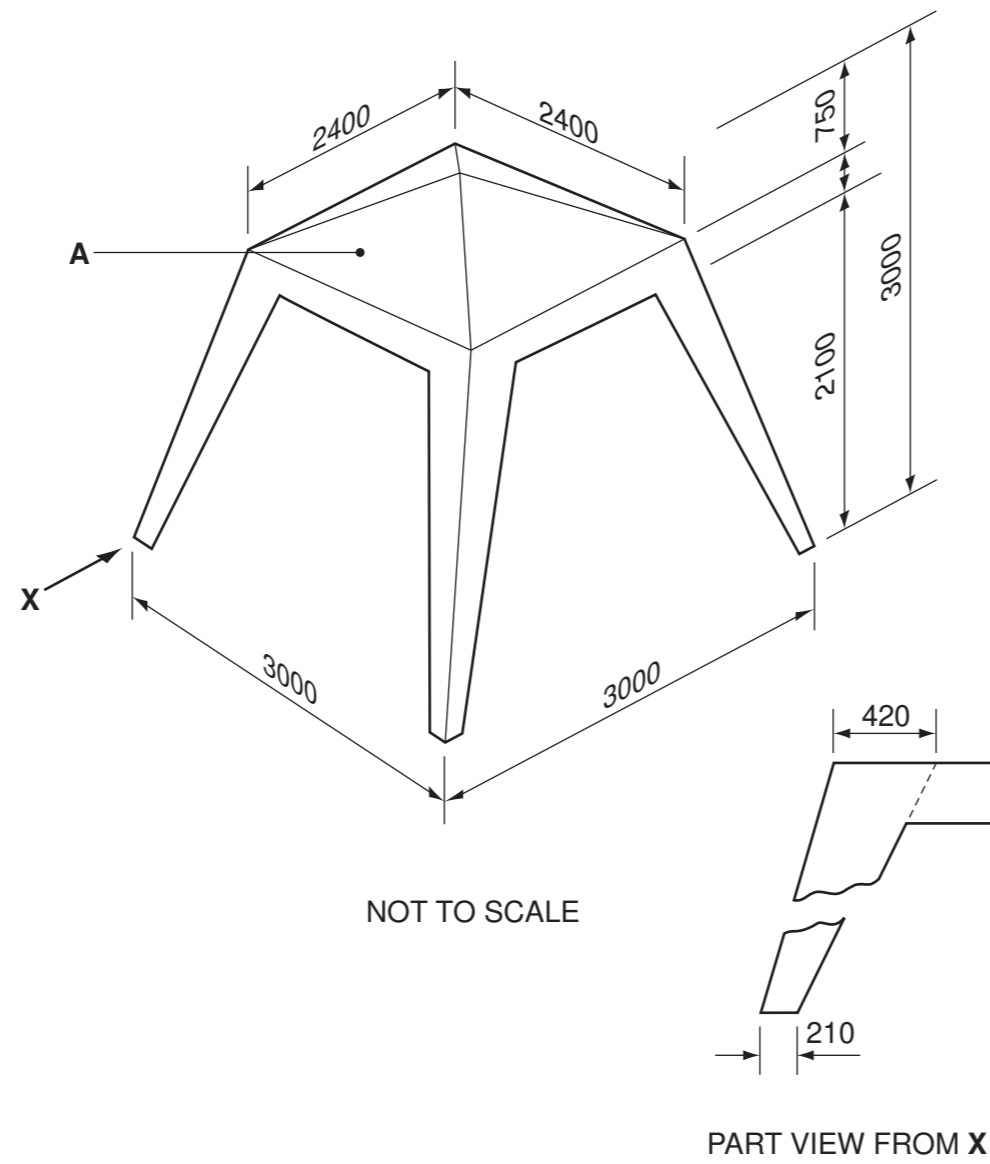


Question 1

A pictorial view of a sunshade is shown on the right. The sunshade is made from a tubular aluminium frame with a canvas cover. The frame is not visible once the sunshade is fully assembled.

(a) In the space below complete the following drawings of the fully assembled sunshade to a scale of 1:30:

- (i) the side view; [10]
- (ii) the plan. [6]

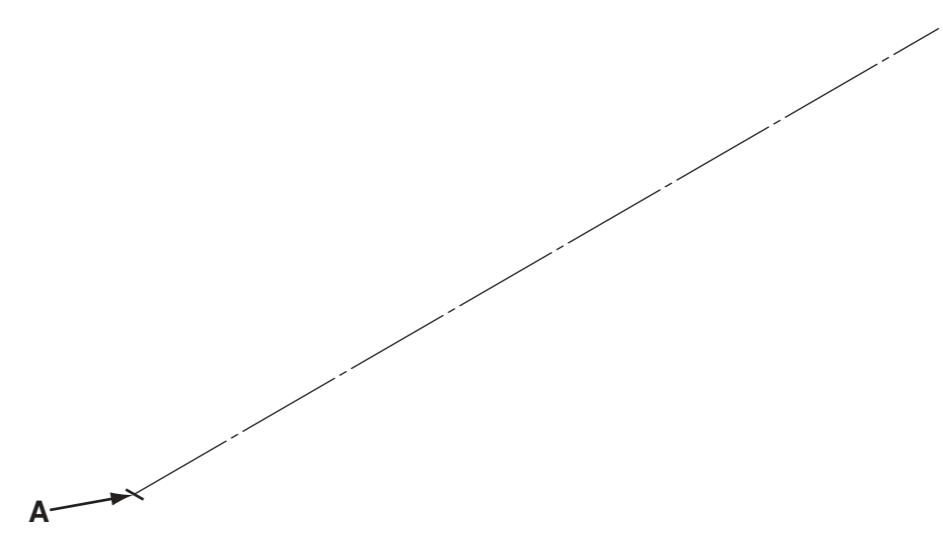
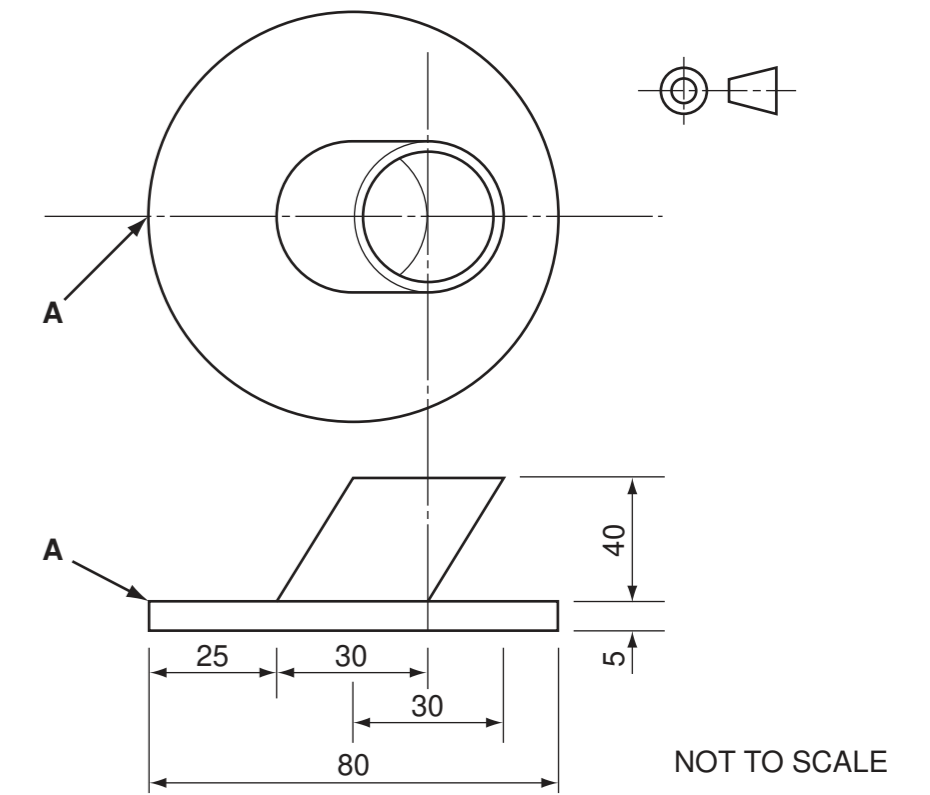


PLAN VIEW

SIDE VIEW

Orthographic views of the base of a leg of the tubular aluminium frame are shown on the right.

(c) Draw full size the base of the leg in isometric projection. Position A has been given as a starting point. Do not show hidden detail. [10]

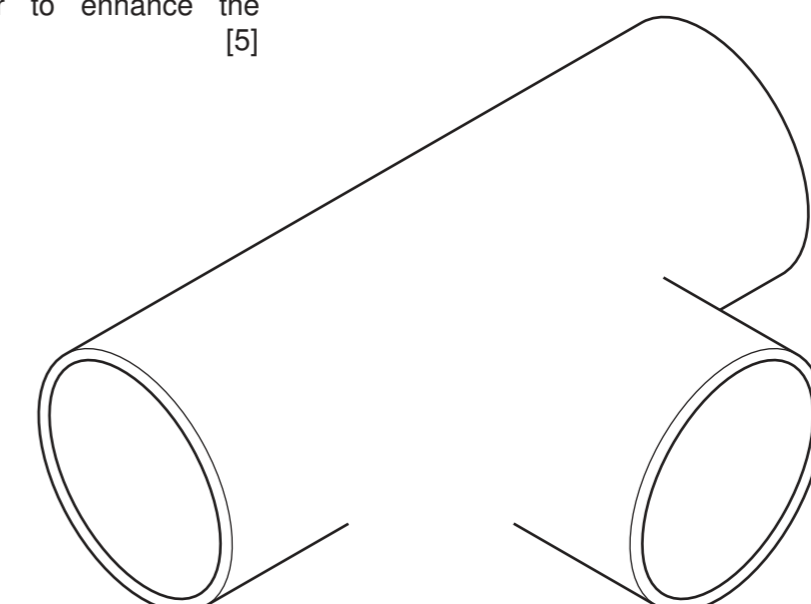


The roof of the canvas cover is made from four panels.

(b) In the space below draw to a scale of 1:30 the true shape of panel A of the roof. Do not draw the other parts of the roof. [3]

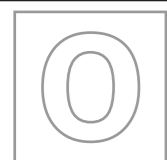
An incomplete isometric sketch of a 'T' section used in a tubular aluminium frame is shown below.

(d) Complete the sketch and add colour to enhance the appearance. [5]



[Turn over]

3 6 1 4 7 5 8 5 1 1



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Ordinary Level

CDT: DESIGN AND COMMUNICATION
Paper 1

No Additional Materials are required
© UCLES 2008

7048/01

October/November 2008
2 hours 30 minutes
plus 15 minutes reading time
IB08 11_7048_01/2RP

SHEET 1 OF 2 (SECTION 1)

Print your surname, other names, Centre number and candidate number in the spaces provided.

Answer **one** question only from Section 1 (Questions 1 and 2).

Answer **two** questions only from Section 2 (Questions 3 to 6).

Answer the questions in the spaces provided.

All construction and projection lines must be clearly shown.

All dimensions are in millimetres unless otherwise stated.

The number of marks is given in brackets [] at the end of each question or part question.

DO NOT WRITE IN ANY BARCODES.

Candidate's Surname

Other Names

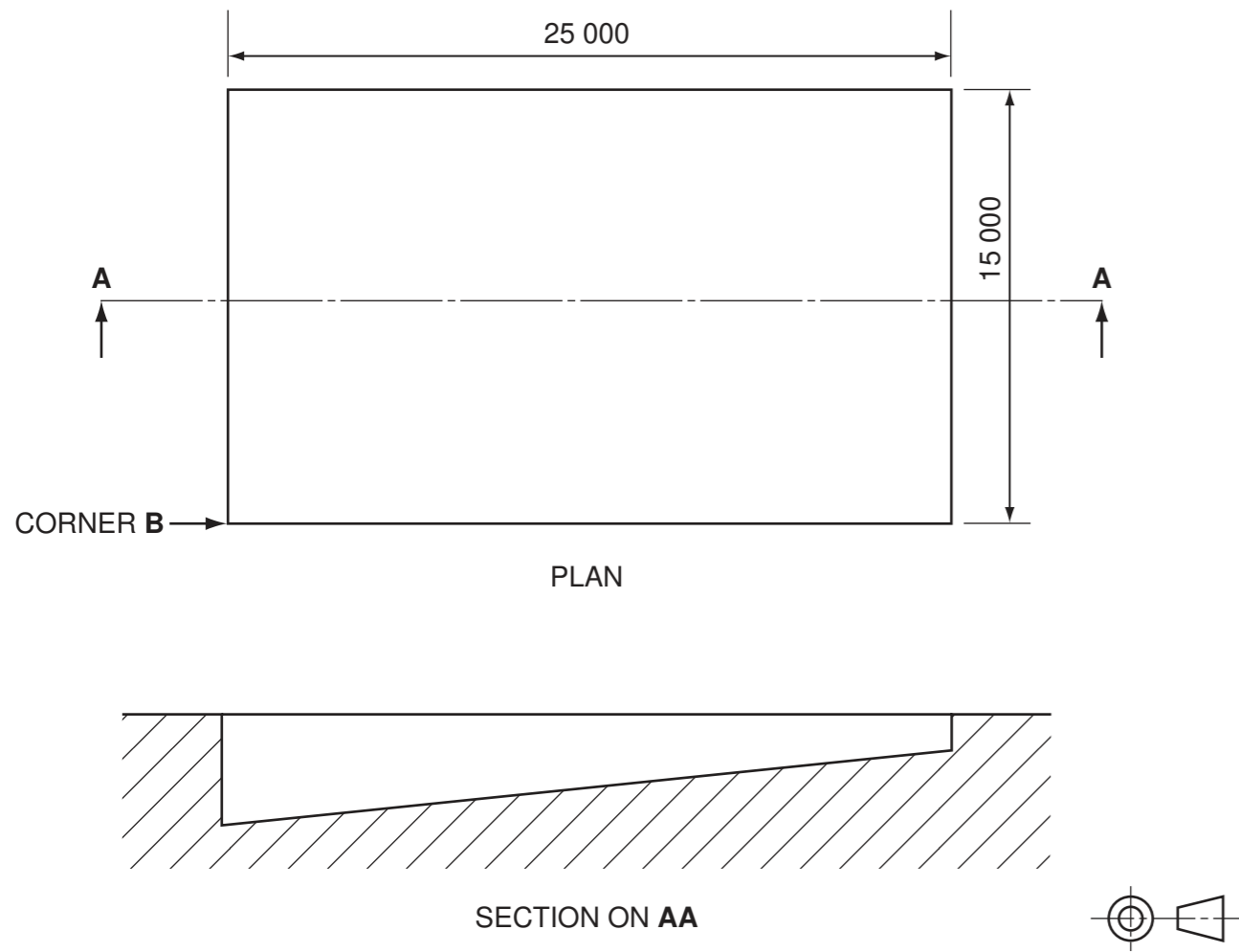
Centre Number

Candidate's Number

Examiner's use only

Question 2

A plan view and a sectional view of a proposal for a new swimming pool are drawn below to a scale of 1:250. The depth of the pool increases from 1250 mm at the shallow end to 3750 mm at the deep end.



(b) (i) In the space below, complete the 1:250 isometric scale drawing of the swimming pool. Corner **B** has been given as a starting point. [5]

Add to the scale drawing of the swimming pool:

- (ii) your design for the diving board; [6]
- (iii) your design for the slide. [6]

(a) The following features are to be added to the swimming pool:

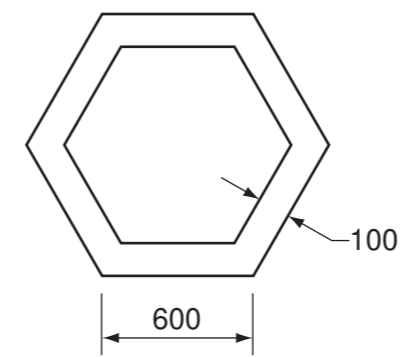
- (i) a 2000 mm high diving board at the deep end of the swimming pool;
- (ii) a 1000 mm high slide at the shallow end of the pool.

In the space below use sketches and notes to show your ideas for the diving board and the slide. [6]



The outline of a warning sign to be used in the swimming pool is shown on the right. In the middle of the sign a pictogram will be added to convey the message 'No ball games'.

(c) In the space below use sketches and notes to show your ideas for the pictogram. [4]



(d) Complete the 1:10 scale drawing of the warning sign on the base line shown on the right. Add your chosen pictogram and add colour to enhance the drawing. [7]



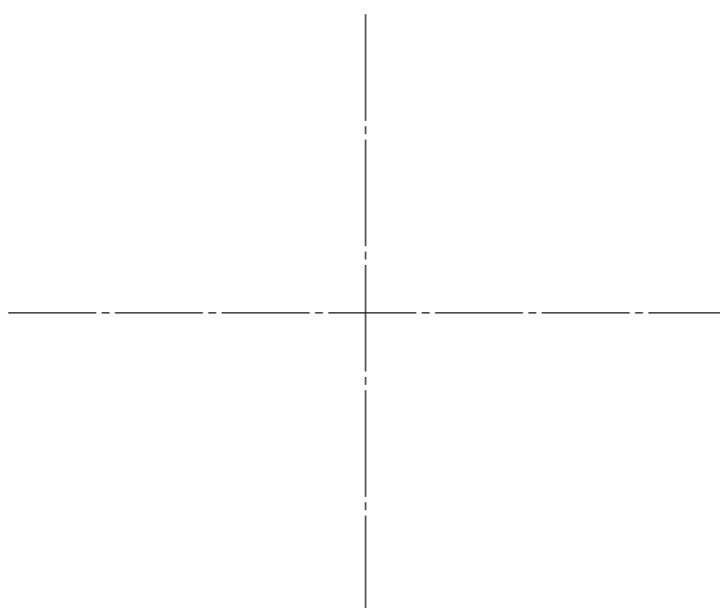
Question 3

A beach café sells a range of cold drinks and ice creams. The new owner of the café wishes to analyse the sales in depth.

The table shows the sales of milkshakes over a period of five days.

| Sales | Monday | Tuesday | Wednesday | Thursday | Friday |
|------------|--------|---------|-----------|----------|--------|
| Strawberry | 136 | 99 | 145 | 120 | 138 |
| Chocolate | 305 | 220 | 278 | 340 | 309 |
| Banana | 247 | 187 | 226 | 260 | 257 |

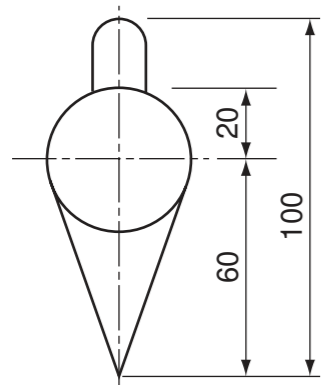
(a) In the space on the right complete the pie chart to show the sales of different flavoured milkshakes on Thursday. Add appropriate colour to the pie chart. [7]



The table below shows the sale of ice creams over a holiday weekend.

| | Total sales |
|----------|-------------|
| Friday | 400 |
| Saturday | 600 |
| Sunday | 800 |

The sketch below is to be used in a pictograph. It represents sales of 1000 ice creams.

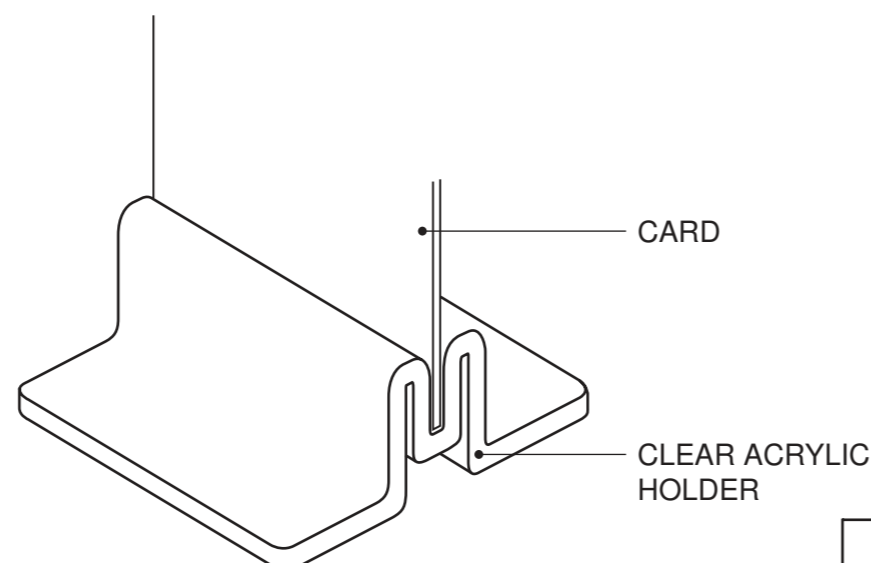


(b) Use the space on the right to complete the full size pictograph to show the sales of ice creams over the holiday weekend. Add colour to your pictograph to enhance the appearance of the illustration. [10]



A range of new ice creams is to be introduced. Each new ice cream will be shown on a 100 × 44 card that slots into a clear acrylic holder. A partly completed full size drawing of the acrylic holder and a card is shown below.

(c) (i) In the space below use sketches and notes to show ideas for a card to advertise a new ice cream called 'Orange Secret'. [6]

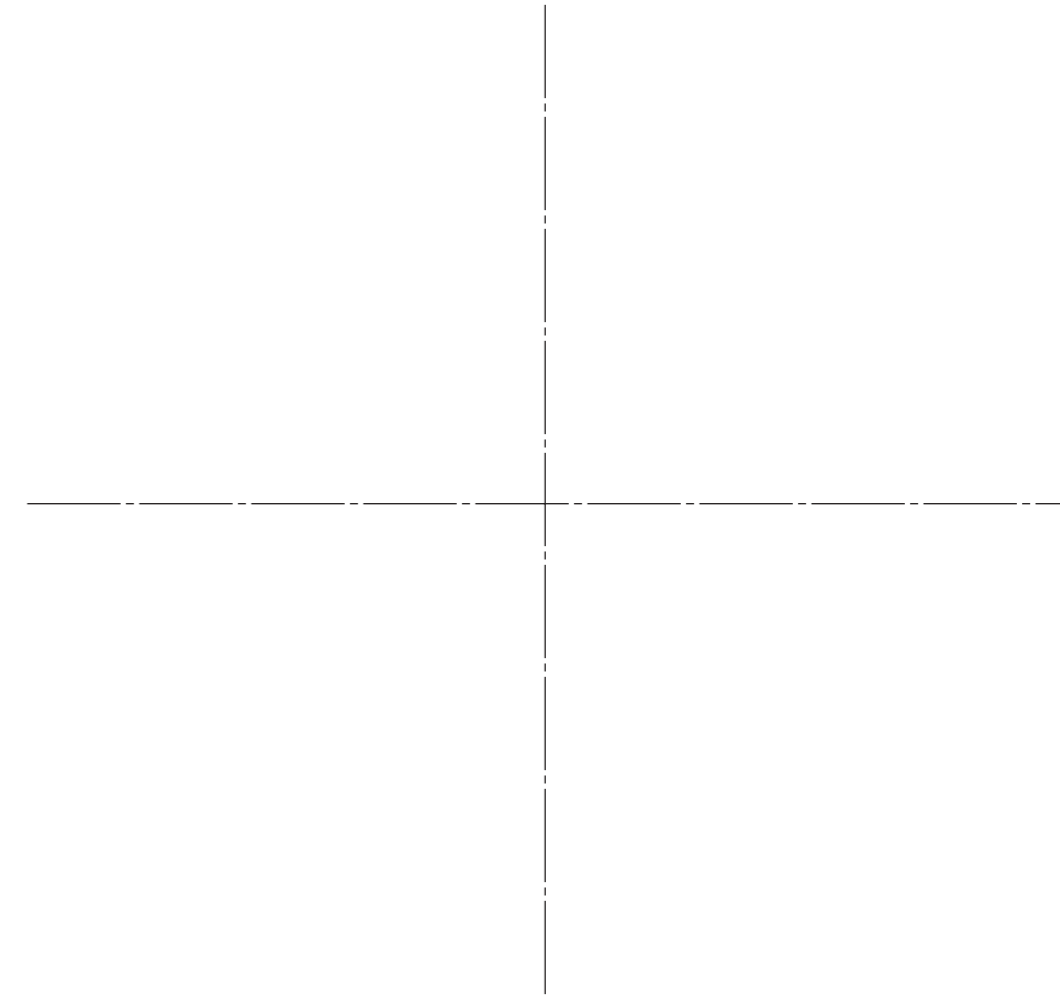
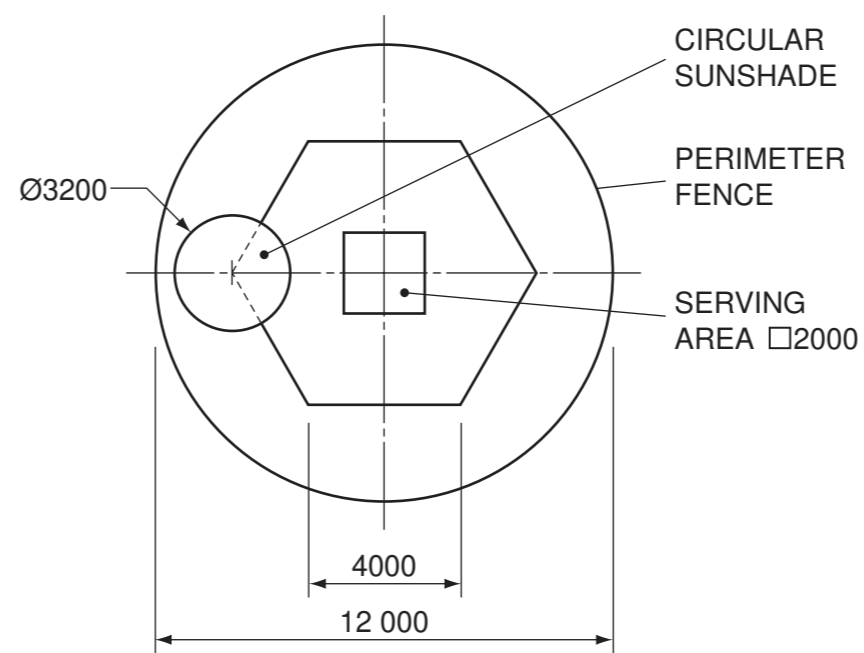


(ii) Show your design for the 'Orange Secret' card in position in the acrylic holder on the right. Use colour to enhance the appearance of both the card and the acrylic holder. [10]

Question 4

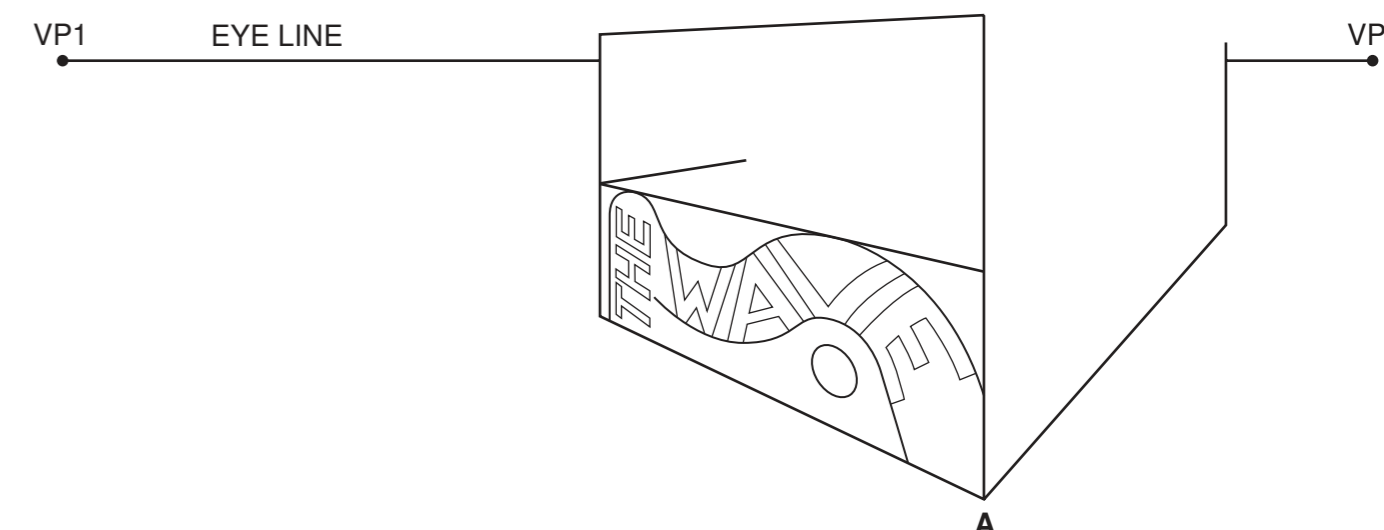
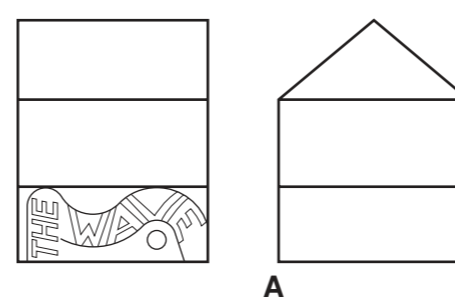
A sketch of a layout for a beach café is shown below. The layout consists of a circular perimeter fence, six circular sunshades positioned at the corners of a hexagon and a square serving area.

(a) Draw the layout for the beach café to a scale of 1:100 in the space on the right. Show all six sunshades in your drawing. [10]



Orthographic views of the serving area, called 'The Wave', are shown below.

(b) Complete the estimated two point perspective drawing of the serving area. [10]

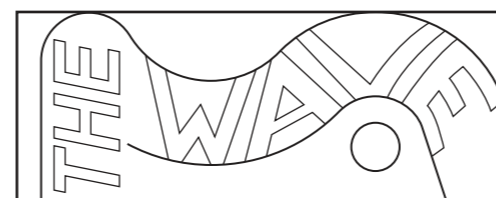


A sketch of the design for the front of the serving area is shown below. A partly completed drawing of the design is also shown on the right.

(c) Complete the drawing by adding:

(i) the lettering and missing curves; [8]

(ii) colour to enhance the appearance of the design. [5]



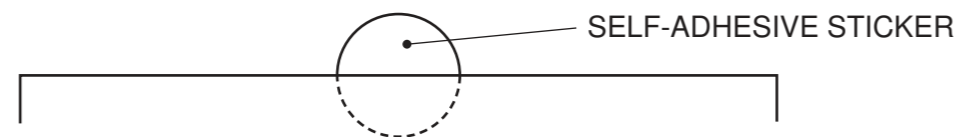
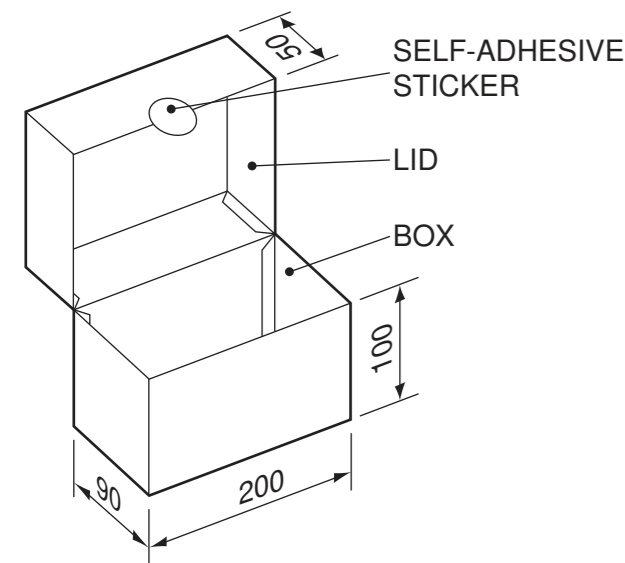
[Turn over]

Question 5

A sketch of a package to hold a cold drink and a hot snack is shown below. The package consists of a box and lid made from one piece of card. The box is kept closed by a circular self-adhesive sticker.

- (a) On the given start line complete the 1:2 scale drawing of the one piece development (net) for the package. Add sufficient glue tabs to hold the package together. [20]

Clearly show all fold lines as -----

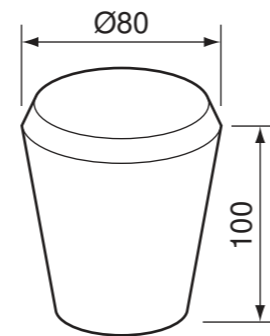


The self-adhesive sticker is an unreliable way of holding the package closed.

- (b) In the space below use sketches and notes to show a modification to the development (net) that will provide an alternative method of holding the package closed. Your solution should be a modification to the one piece development (net) and not use glue, paper fasteners or Velcro. [6]

A divider is used inside the package to keep the cold drink and hot snack separate. The approximate size of the cup for the drink is shown on the right.

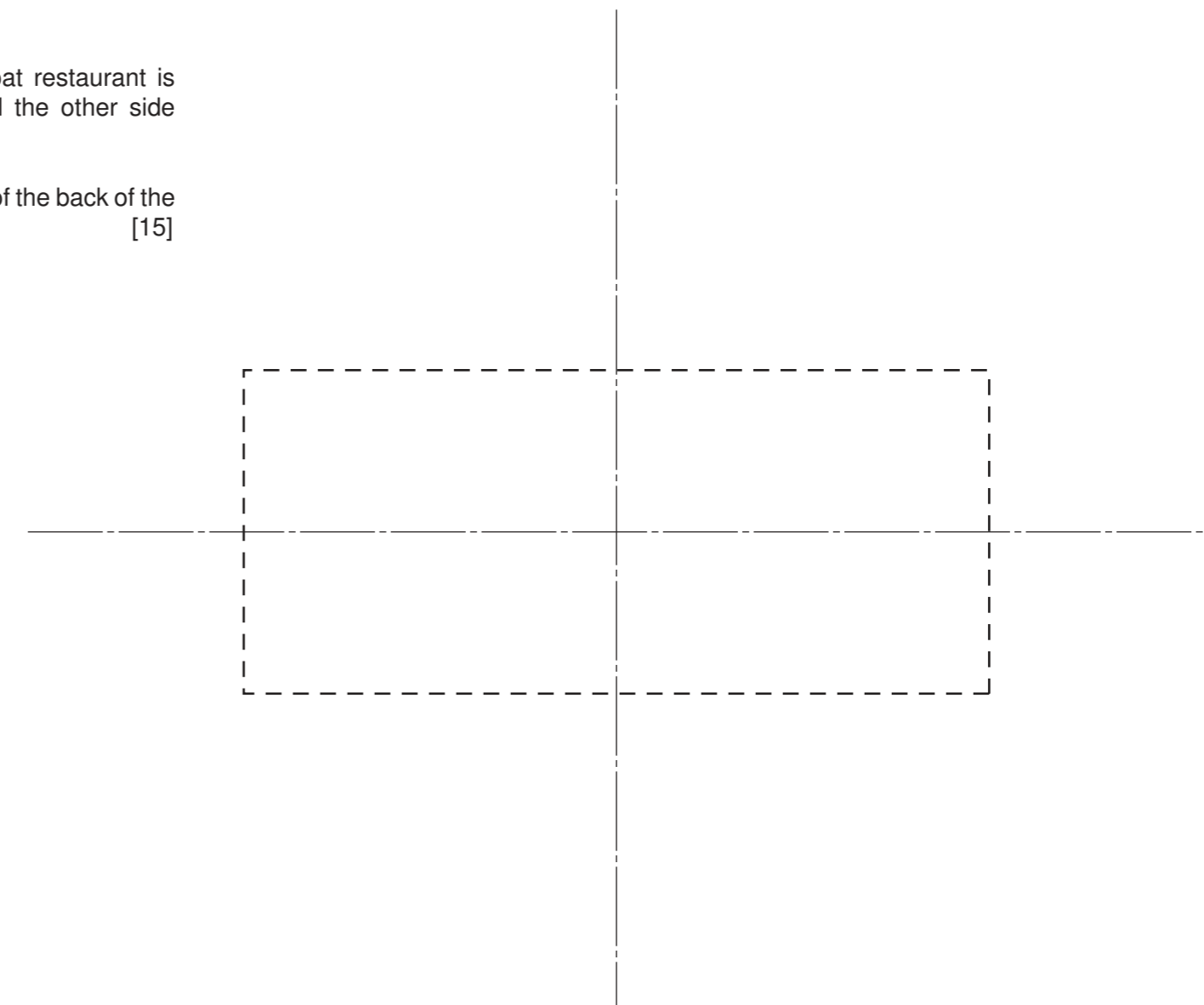
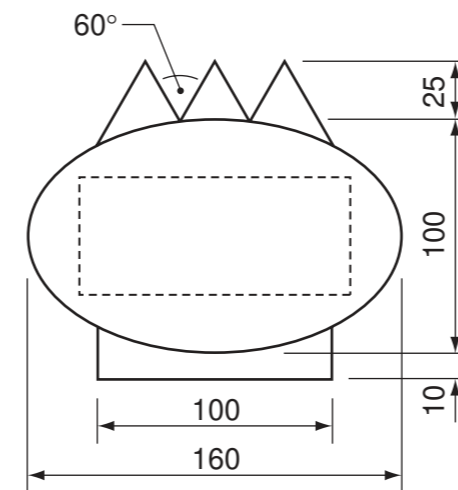
- (c) In the space below use sketches and notes to show a design proposal for the divider. Indicate the material to be used and how the divider will be held in position. [7]



Question 6

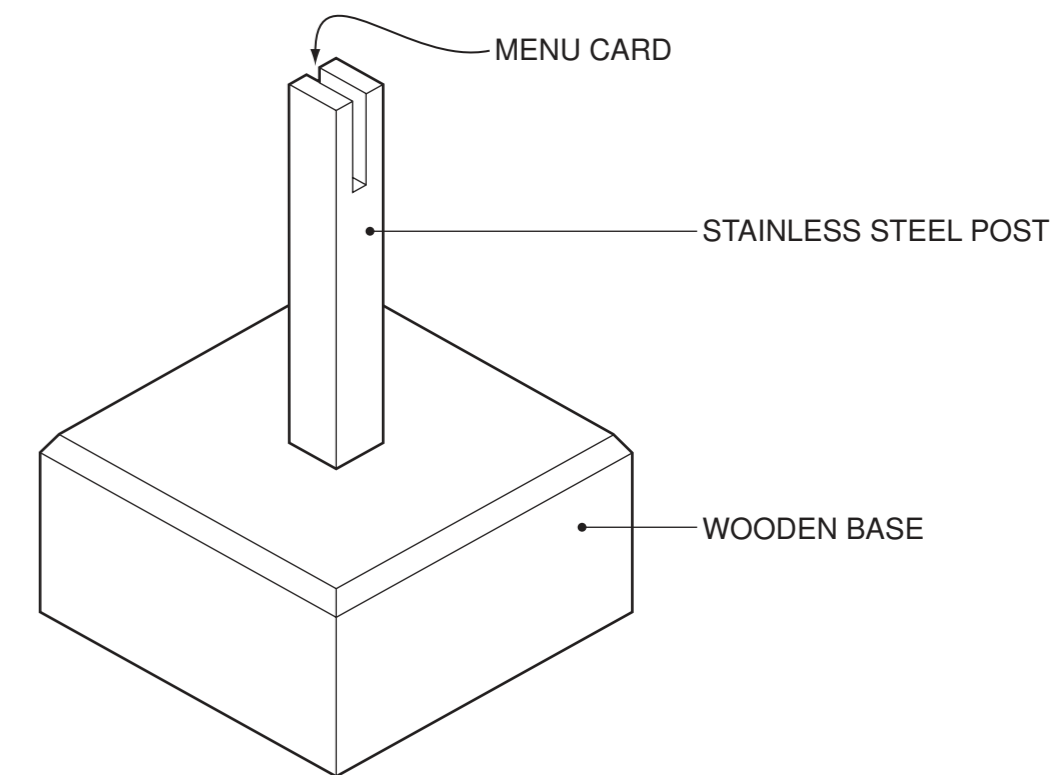
A design for a child's menu card for the Speedboat restaurant is shown below. A menu is printed on one side and the other side contains a colouring competition for young children.

- (a) Complete the drawing of the outline shape of the back of the menu card in the space on the right. [15]



The menu card is held in a stand that is made from a wooden base and stainless steel post. An outline drawing of the stand is shown on the right.

- (b) Complete the drawing of the stand by adding colour to enhance the appearance. [8]



- (c) Develop a design for a colouring competition to be used in the Speedboat restaurant.

- (i) Use the space below to show sketches and notes for your design ideas. [4]
 (ii) Add your chosen design to the back of the menu card shown on the right. [6]



Back of menu card