



2007 Graphic Communication

Advanced Higher

Finalised Marking Instructions

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1. Design Elements and Design Principles should be considered when producing a layout.

With reference to the leaflet for use with **Question 1**, select **two Design Principles** and **two Design Elements** from the list below and explain fully how each contribute to the layout.

Design Principles

Contrast
White Space
Proportion

Design Element

Colour
Line
Shape

Design Principle 1

Contrast:

Headline Text in red against white background – very effective in grabbing attention.

Red blocks of colour with contrasting white text – also effective in grabbing attention but providing movement around page.

The large dominant graphic contrasts with the smaller graphic items – makes the page interesting.

The red bobbles breaking into the yellow line are a good contrast and create movement or flow down the line.

Design Principle 2

White Space:

Not a great deal evident but a little around the headline and sub headline – allows the reader to take in the importance of the message from these. A little is evident down the outside right edge. This breaks up the text and gives the reader a little breathing space to allow them to take particular note since these are recipes.

Proportion:

The left page features a dominant graphic and headline, which are in proportion to each other. This alerts the reader to what the content is about. The right page however contains small graphics and small text boxes containing textual information, which is in proportion to the graphics they are in close proximity to.

Design Element 1

Colour:

Red is used to grab attention but the piece is about Christmas so it is quite symbolic that red is used.

Yellow also used for sub heads – yellow is also an attention-grabbing colour but the two are a good contrast against the white background and provide a sense of movement around page. Red and yellow harmonise with each other. The colours used compliment the food on offer.

Design Element 2

Line:

Along the top and bottom of the page to define the limits of the page.

The yellow line forming a rectangular box around the recipes – this separates and provides organization to this section from the rest of the page.

The red line around the wine boxes separates them from the other elements on the page.

Shape:

Mainly rectangles and squares – this is what most readers are comfortable and familiar with. Red circles down red edge look like holly berries and emphasise the price per person.

Small black triangle – bottom right indicating that the reader should turn over the page.

2 marks for good explanation, which must relate to feature identified on leaflet.

1 mark for fair explanation, which must relate to feature identified on leaflet.

(No ½ marks)

(8)

2. The following question refers to the commercial printing process.

(a) State four factors that would determine the choice of print method used for a publication. 4

- (i) *Quantity*
- (ii) *Number of Colours*
- (iii) *Print size/size of document A3, A4, A5*
- (iv) *Medium to be printed on*
- (v) *Print quality required*
- (vi) *Cost to produce*
- (vii) *Timescale*
- (viii) *Purpose of the publication*

(Any four from the points above)

(b) What is the term used to describe the process of ordering pages of a document in preparation for printing? 1

Imposition

(c) Sketch a four page signature below. 1

4	1
---	---

2	3
---	---

(No ½ marks) **(6)**

3. A magazine is being prepared to promote each sport taking part in the 2008 Olympics in Beijing. The following specification has been drawn up.

- The orientation of the page will be portrait.
- The heading for each page must contain the name of the sport.
- A representation of graphic 1 and graphic 2 must be included.
- A space for text about the sport must be included.



Graphic 1



Graphic 2

(a) Using the sport of Fencing, sketch, in the space opposite, **two thumbnails** to satisfy the specification.

- One of the layouts must be symmetrical the other asymmetrical.
- Annotate either of your thumbnails to include information on:
 - headline
 - font type
 - font size
 - columns
 - gutters
 - colour
 - graphic size and position.

8

3. (a) (continued)

Thumbnail 1

Page A4, three column structure with gutters of 5 millimeters and a 10 millimeter margin both left and right.

Page divided into three horizontal sections with guidelines for ease of location for graphics and text.

Page is symmetrically balanced.

Colour of page is plain white to both enhance the appearance of logo and to connect with colour of competitors clothing.



Headline is made from plain black text with an outline white text in front. This gives the impression of movement with the bottom part of the 'g' being a reverse for interest.

Sans Serif Arial Font both for headline and body text to be used for modern feel. Body text to be 12 point with sub heads in upper case and bold. Headline to be 50 point.

Two main graphics reproduced at top of page. This would be the same for each sport which would bring unity to whole publication.

Marks

Meeting specification on each thumbnail @ 1 each	= 2
Correct balance for each thumbnail @ 1	= 1
Features identified/annotated correctly	
7=5, 6=4, 4-5=3, 3=2, 1-2=1	= 5

(b) Explain the difference in purpose between thumbnails and visuals.

2

Thumbnails are to allow a designer to explore and visually preserve ideas. A visual should be an accurate representation of the final chosen design.

1 mark for each relevant point.

(No ½ marks)

(10)

4. When handling graphics Vector and Bitmap images are used.

(a) Explain why Bitmap images tend to be much larger files than Vector images. 2

*Bitmap Images are made up of pixels on a rectangular/square grid
ie tiny dots of individual colour make up what is seen on screen.*

When combined these tiny dots form an image.

Every pixel is saved.

The white areas of the background are also individual pixels even though they appear to be one solid colour.

When scaled up pixels – added.

Can not be displayed without a background which adds to the size.

Vector Images are made up of individual scalable objects, which are defined by mathematical equations, which allows them to render at the highest quality. Objects may consist of lines, curves and shapes with editable attributes such as colour, fill and outline.

Bitmap

Restricted to rectangle

Resizing reduces quality

Pixels in a grid

Resolution dependent

Minimal support for Transparency

Vector

Scalable

No background

Resolution Independent

Unsuitable for photo realistic images

(A comparison containing any 2 points from the list above)

(No ½ marks)

(b) Explain why Vector images do not lose definition when scaled. 2

An object can be modified by shaping and transforming using nodes and handles.

A vector image replots itself each time it is resized.

Unlike Bitmap files Vector files are independent of a background.

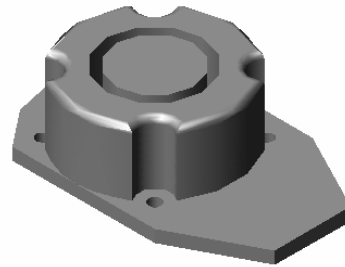
(Any 2 points from the list above)

(No ½ marks)

(4)

5. Orthographic views of a component are shown below.

With the aid of sketches, explain how a 3D CAD Solid Model of this component can be produced.



Creation of:

Flat plate

(1 mark)

Bottom spigot

(1 mark)

Top boss including four holes and centre area

(2 marks)

(Above should include descriptions of appropriate modelling techniques and editing commands ie Boolean operations etc).

Appropriate sketches

(2 marks)

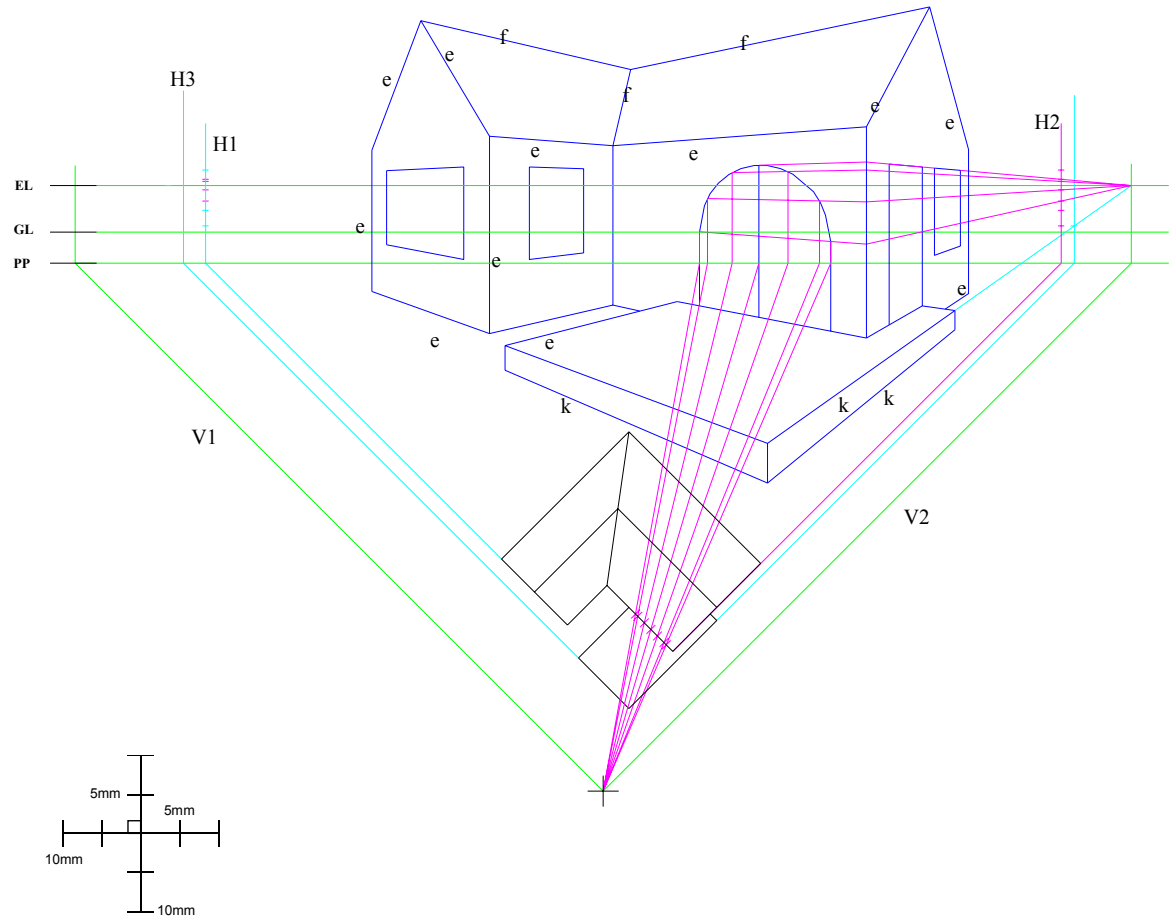
(No ½ marks)

(6)

6. Measured Perspective (16 marks)

Bath

(a)	Location of V1 + V2 (Both required)	1
(b)	VP1 + VP2 (Both required)	1
(c)	Height Line – Left Gable (H1)	1
(d)	Height Line – Right Gable (H2)	1
(e)	Left & Right Gables & Connecting walls	2
	16 lines – 14-16 = 2, 9-13 = 1	
(f)	Roof 3 lines	1
(g)	Arch Construction 7 points	2
	7 = 2, 5-6 = 1	
(h)	Smooth curve	1
(i)	Arch Line Detail 3 Lines	1
(j)	Patio Height Line (H3)	1
(k)	Patio 11 Lines	2
	9-11 = 2, 6-8 = 1	
(l)	Door & Windows 15 Lines	2
	12-15 = 2, 8-11 = 1	
	Total	16



7. Interpenetrating Pipes (16 Marks)

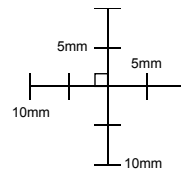
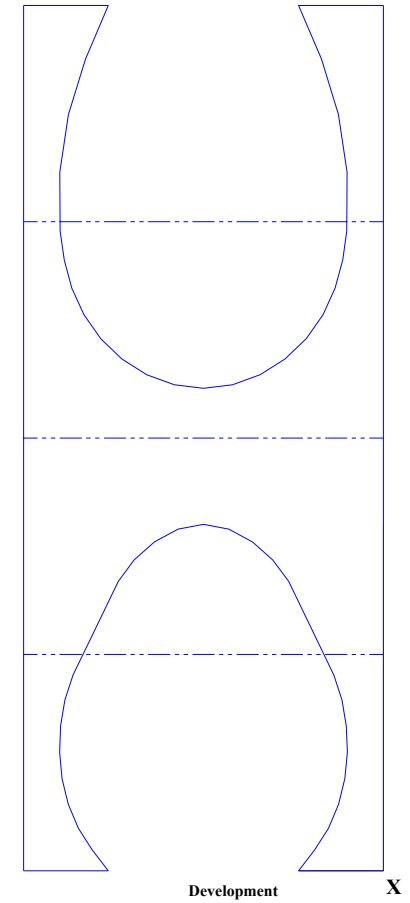
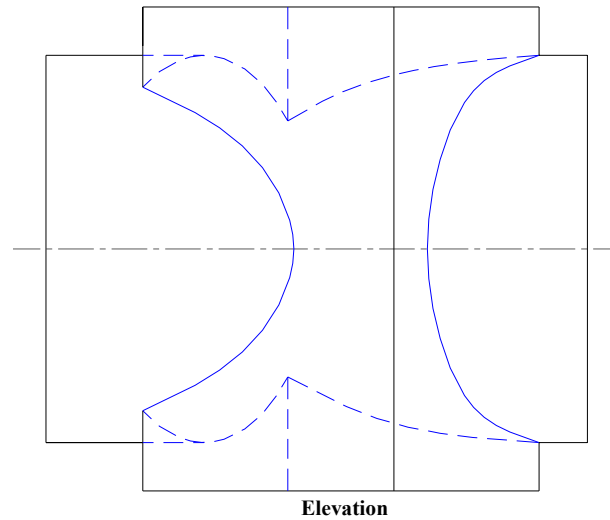
Elevation

- (a) Construction Plan/End Elev. 1
- (b) Front Curves – 12 Points 3
12 = 3, 10 - 11 = 2, 8 - 9 = 1
- (c) Back Curves – 12 Points 3
12 = 3, 10 - 11 = 2, 8 - 9 = 1
- (d) Hidden vertical lines – 2 1
- (e) Hidden horizontal lines – 2 1

Development

- (f) True length of panels (Fold lines indicated) 1
- (g) 20 points intersecting surface 3
20 = 3, 16 - 19 = 2, 12 - 15 = 1
- (h) Smooth Curve (1 mark each) 2
- (i) Perimeter (6 edges = 1) 1

Total 16

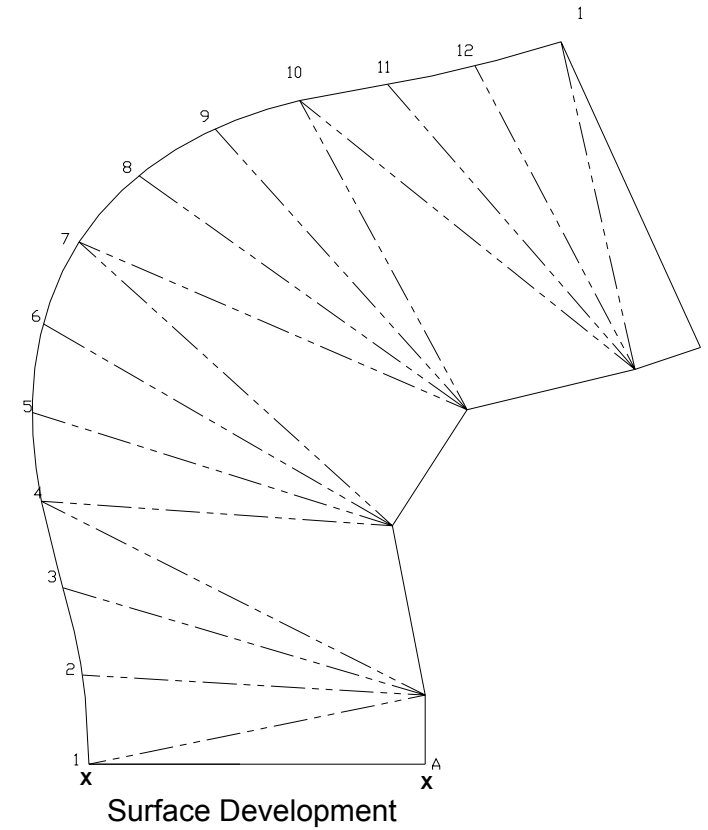
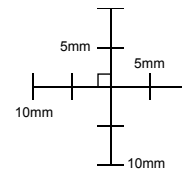
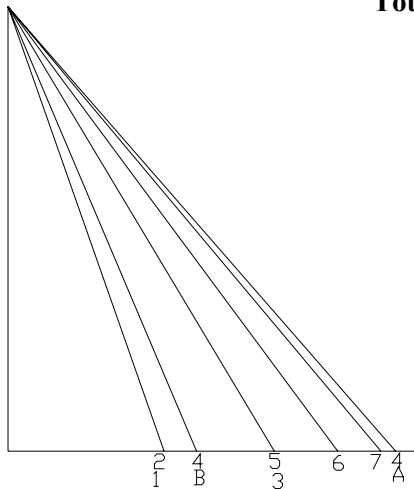


8. Transition (14 Marks)

Development

- (a) True length construction points 1-3 and 5-7 2
6=2, 4-5=1
- (b) True length construction point 4A+4B 1
- (c) Perimeter 3
7 = 3, 5-6 = 2, 3-4=1
- (d) Development construction 13 points 7
13 = 7
11 - 12 = 6
9 - 10 = 5
7 - 8 = 4
5 - 6 = 3
3 - 4 = 2
1 - 2 = 1
- (e) Smooth curve 1

Total 14



[END OF MARKING INSTRUCTIONS]