

**JUNIOR LYCEUM and SECONDARY SCHOOL  
ANNUAL EXAMINATIONS 2009**

Directorate for Quality and Standards in Education  
Educational Assessment Unit

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**FORM 3 (1<sup>st</sup> year)      GRAPHICAL COMMUNICATION      TIME: 2 hours**

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**NAME :** \_\_\_\_\_ **CLASS :** \_\_\_\_\_

**Instructions**

- Write your name and class on all sheets.
- Attempt **ALL** questions.
- All answers are to be drawn accurately, with instruments, unless otherwise stated.
- All construction lines **MUST** be left on each solution to show the method used.
- Drawing aids may be used.

**Information**

- All dimensions are in millimetres.
- Estimate any dimension not given.
- Marks will be awarded for accuracy, clarity and appropriateness of construction.

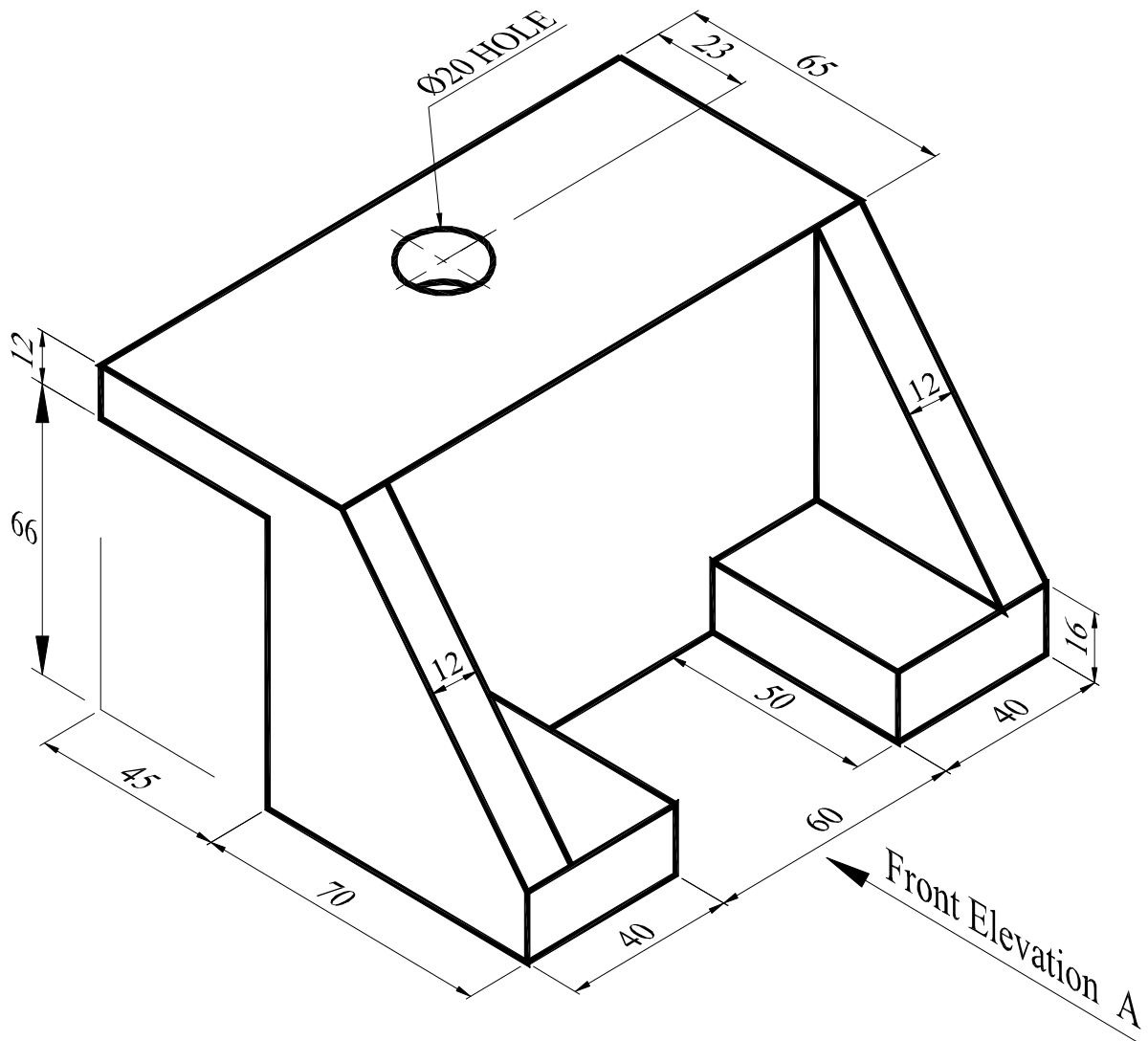
| Question  | 1  | 2  | 3  | 4  | 5  |
|-----------|----|----|----|----|----|
| Max. mark | 36 | 15 | 15 | 16 | 18 |
| Mark      |    |    |    |    |    |

1. The figure below shows a pictorial view of a **BRACKET**.  
Draw, in **first angle orthographic projection**, the following views:

- (a) a front elevation from arrow 'A'. 12 marks  
(b) a complete plan. (including hidden detail) 20 marks

- Note: (i) Show the scale used. 2 marks  
(ii) Draw the symbol of projection used. 2 marks

**Total 36 marks**

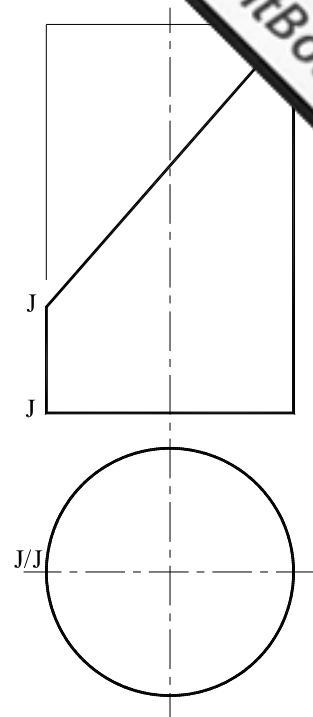
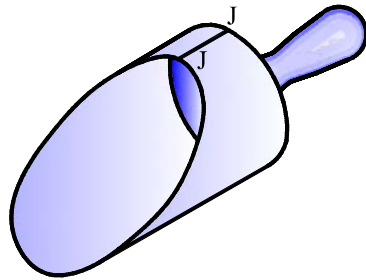


2. The pictorial view, shown below, shows a sugar scoop made from thin sheet metal and a wooden handle. A front elevation and a plan of the cylindrical part of the scoop are also given.

Construct a one piece development of the scoop assuming the joint to be along **JJ**.

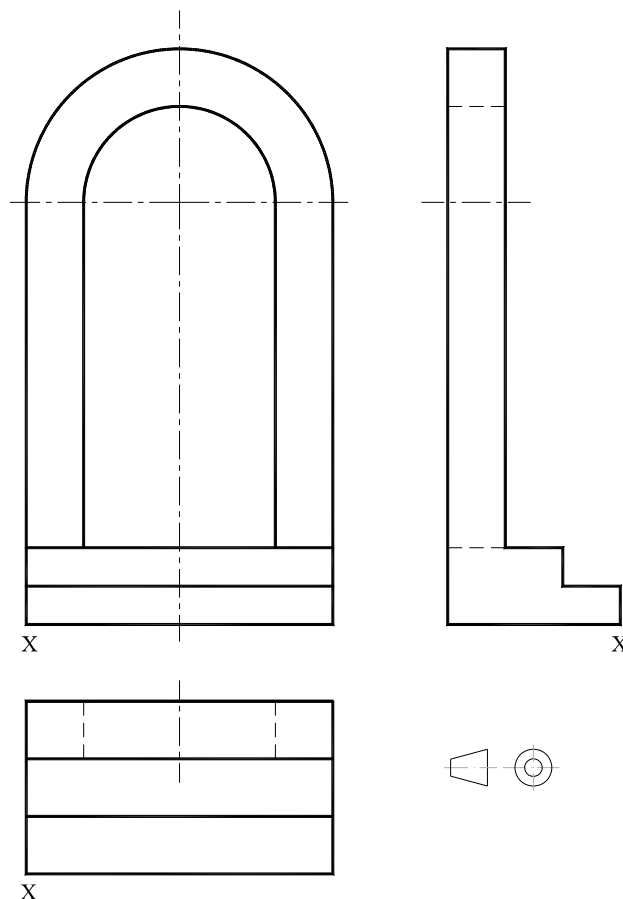
Show all construction lines.

15 marks



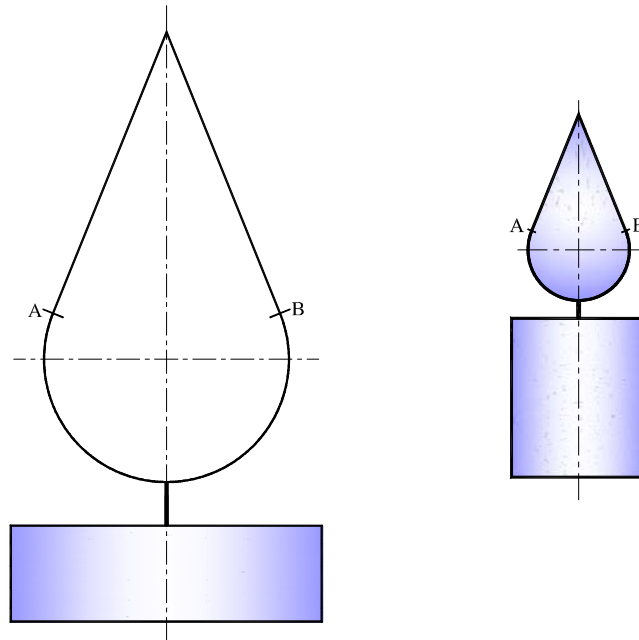
3. Three orthographic views of a stepped arched doorway are given. Using the given start lines and taking the dimensions from the given views on the starter sheet, convert full size, the drawing to an **Isometric view**. Position corner **X** to be the lowest point in your drawing.

15 marks



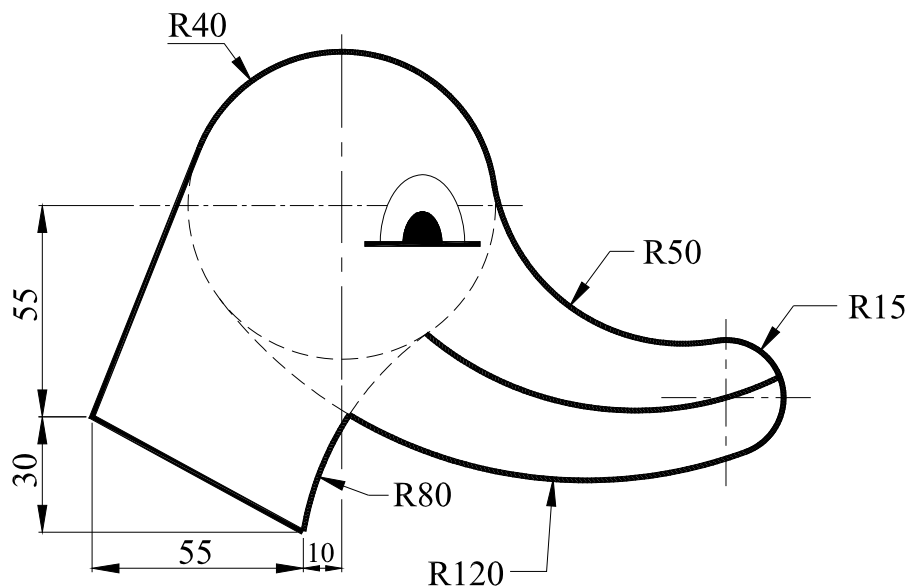
4. The flame of the logo of a candle factory consists of a part circle and two tangents as shown below.  
Using the given start lines draw:  
(a) the part circle **A** and **B** and having a 45mm radius.  
(b) the two tangents at points **A** – **B** forming the straight part of the flame.

16 marks

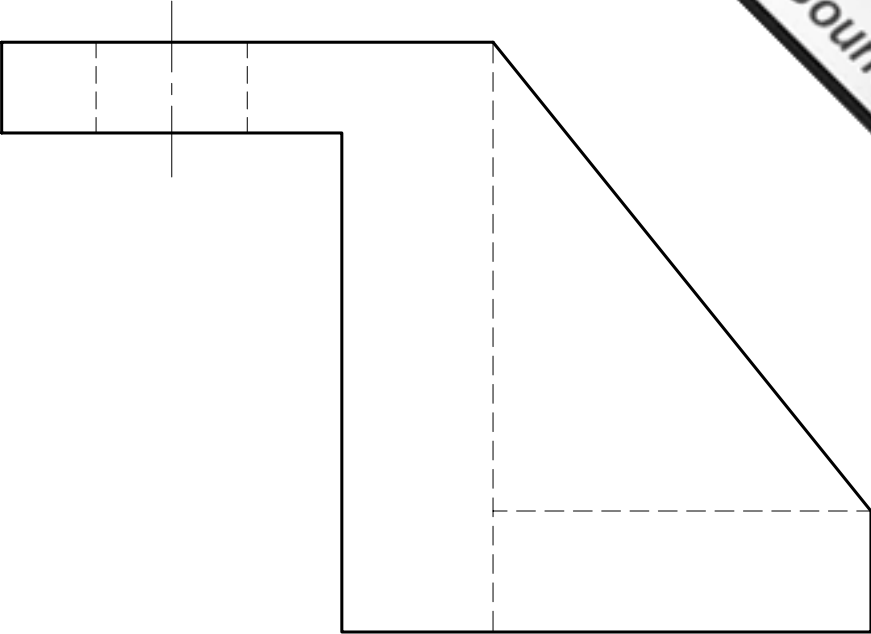
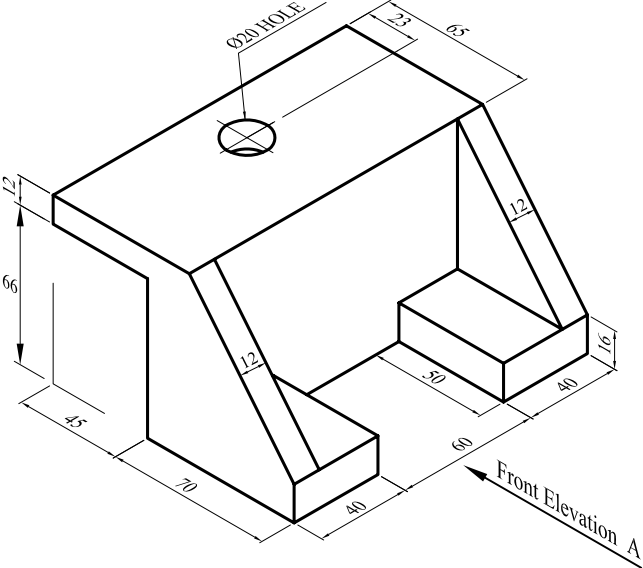


5. The diagram below shows part of the outline of a drawing.  
Using instruments, complete a full size drawing of the given view.  
Clearly show constructions for the location of all compass drawn arcs.

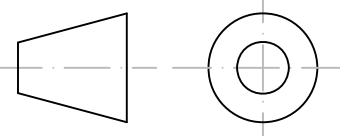
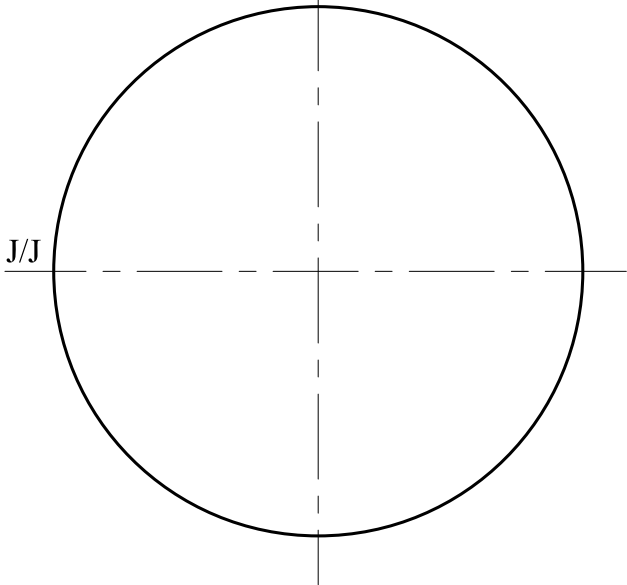
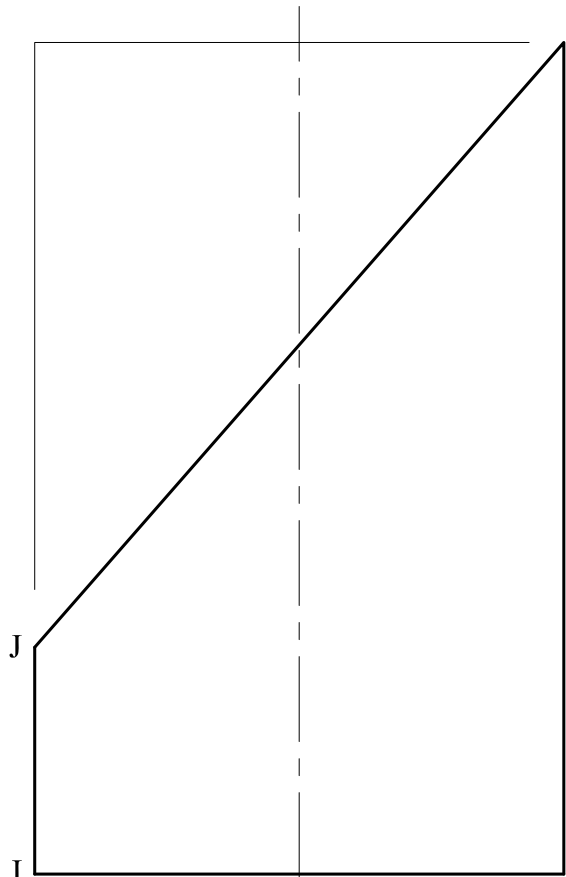
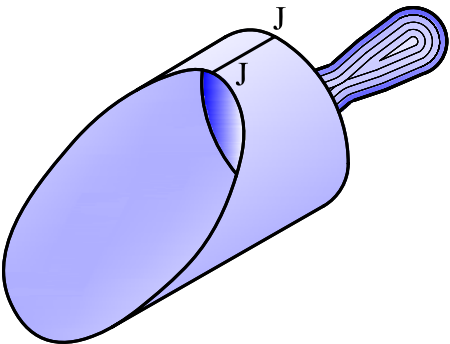
18 marks



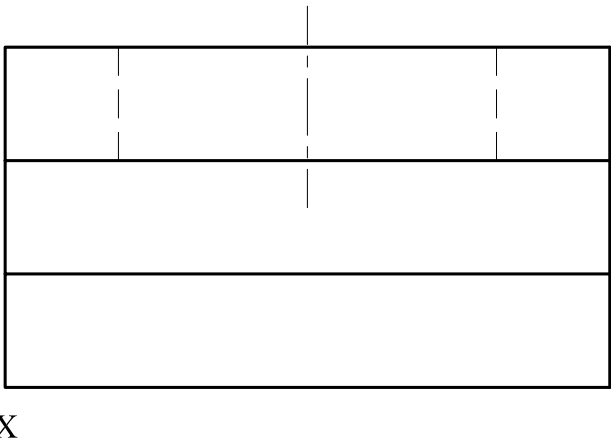
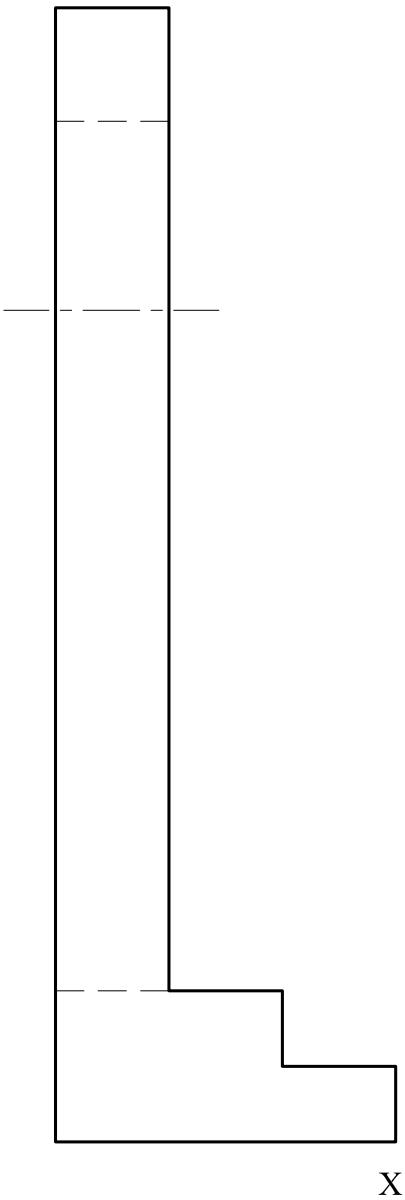
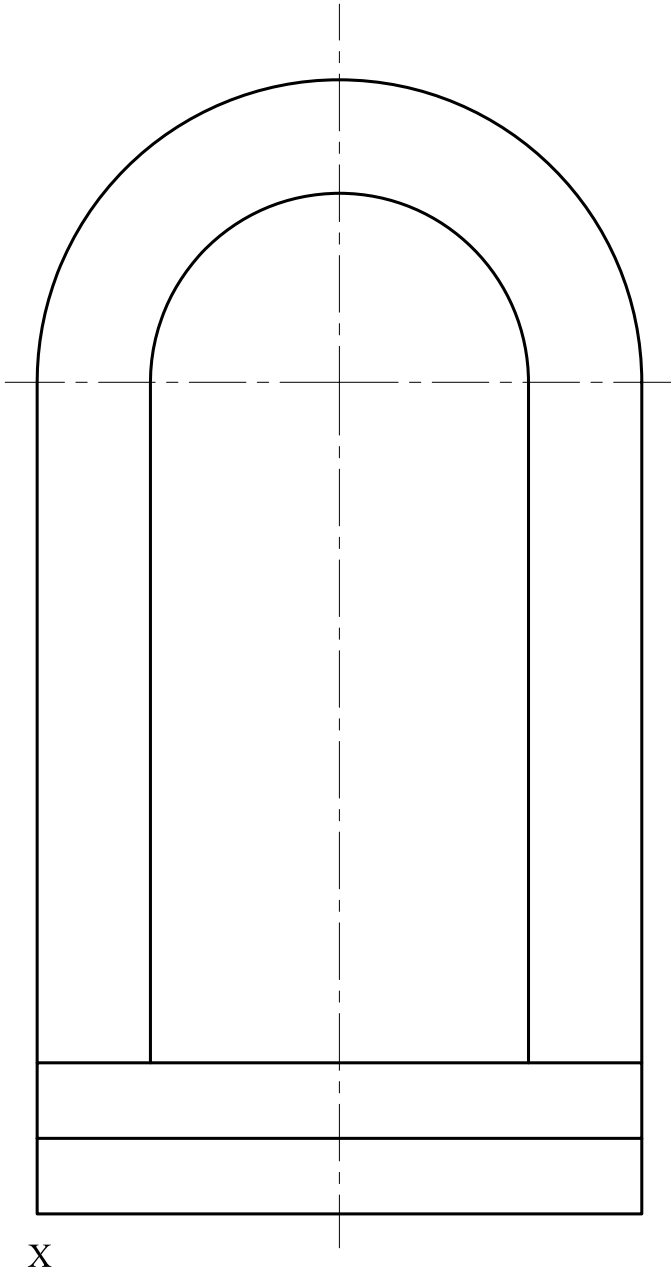
QUESTION No.1



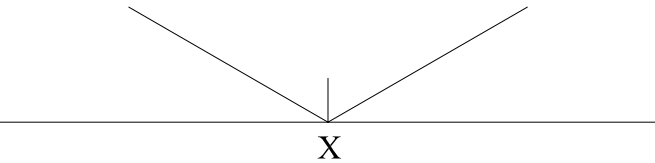
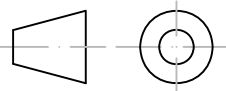
QUESTION No.2



QUESTION No.3



Scale: 1 : 1



Note: Dimensions of Isometric to be taken from the given orthographic views

