

STAPLE HERE

FOR OFFICIAL USE

--	--	--	--	--	--	--

X033/101

NATIONAL QUALIFICATIONS 2010
THURSDAY, 27 MAY
1.00 PM – 3.00 PM

GRAPHIC COMMUNICATION
INTERMEDIATE 1

Fill in these boxes and read what is printed below.

Full name of centre				Town	
Forename(s)				Surname	
Date of birth	Day	Month	Year	Scottish candidate number	Number of seat
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

70 marks are allocated to this paper

- 1 Answer all questions.
- 2 Read each question carefully before you answer.
- 3 Written answers may be in ink or pencil.
- 4 Drawings and sketches must be in pencil.
- 5 Dimensions are given in millimetres or as stated.
- 6 Orthographic drawings are in third angle projection.

At the end of the examination

check that your name is on every sheet;
put the sheets in correct numerical order;
place this sheet on top of the others;
join all sheets together by stapling at the top left-hand corner;
before leaving the examination room, you must give these sheets to the Invigilator
(if you do not you may lose all the marks for this paper).

Question	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
Total Marks	



[BLANK PAGE]

1

A toy company has decided to introduce a new colour scheme for its packaging. A **tint** of green was suggested.

(a) State what is added to green to make a **tint**.

.....1

(b) State a tertiary colour that **contrasts** with green.

.....1

(c) State how a **tertiary** colour is created.

.....1

(3 marks)

2

A golf club produces a monthly newsletter. In the space below, produce a sketch, approximately to scale, of this month's newsletter using the details below.

(a) A landscape page 150 mm × 100 mm.

1

(b) A header showing "June 2010".

1

(c) A footer showing "page 1".

1

(d) Two equal columns.

1

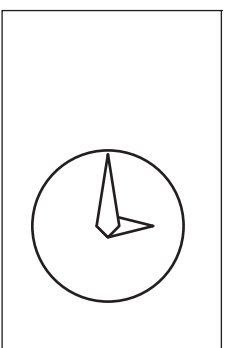
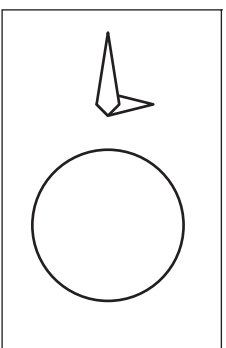
(4 marks)

Various stages in the production of a CAD drawing of a clock are shown below.

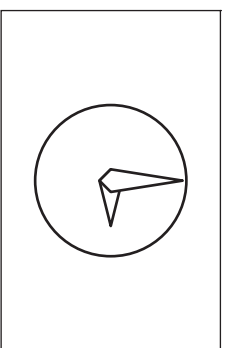
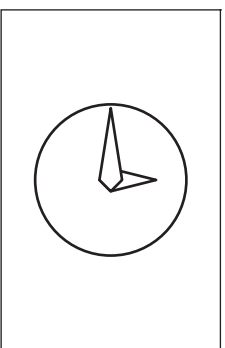
(a) State the **single** CAD command that could be used for each stage.

Before

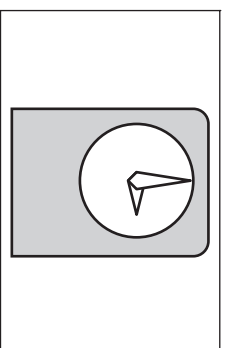
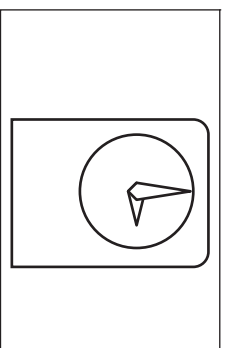
After



Command 1



Command 1



Command 1

(b) State **two** advantages, other than speed and cost, of Computer-Aided Graphics over manual methods.

(i) 1

..... 1

(ii) 1

..... 1

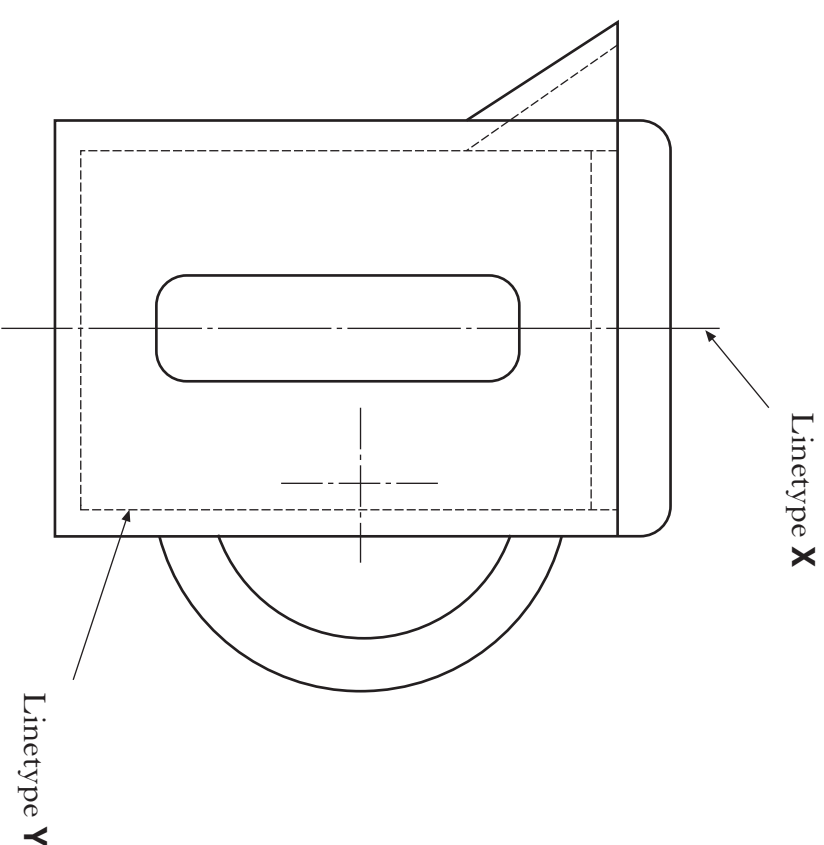
(5 marks)

An elevation of a portable kettle is given below. With reference to British Standards:

(a) **Add** the following dimensions to the elevation.

(i) The **overall height** of the kettle: 90 mm 1

(ii) The **radius** of the outer edge of the handle: 30 mm 1



(b) Identify the following linetypes.

(i) Linetype **X** 1

(ii) Linetype **Y** 1

(4 marks)

5

The elevation and an isometric view of a walkie talkie are given.

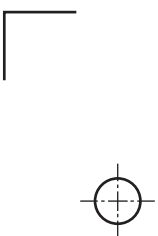
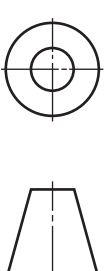
Draw, full size, in the positions indicated:

(a) the plan;

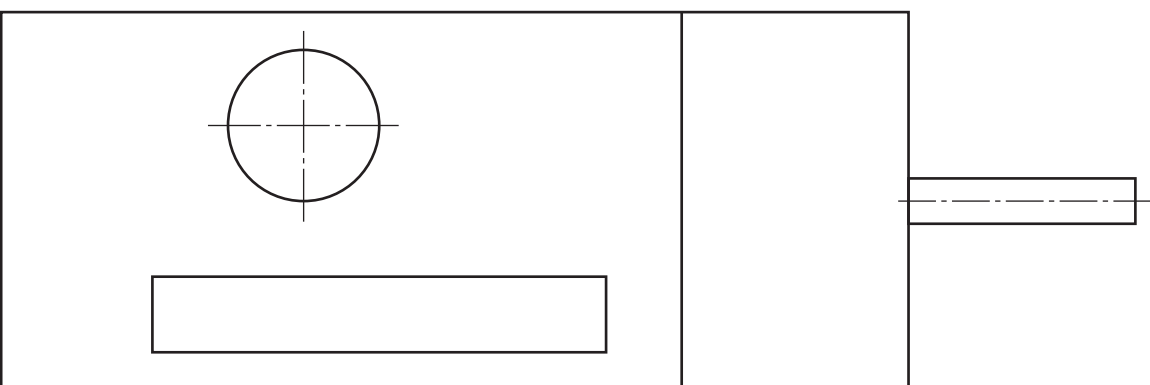
(b) the end elevation.

Show all hidden detail.

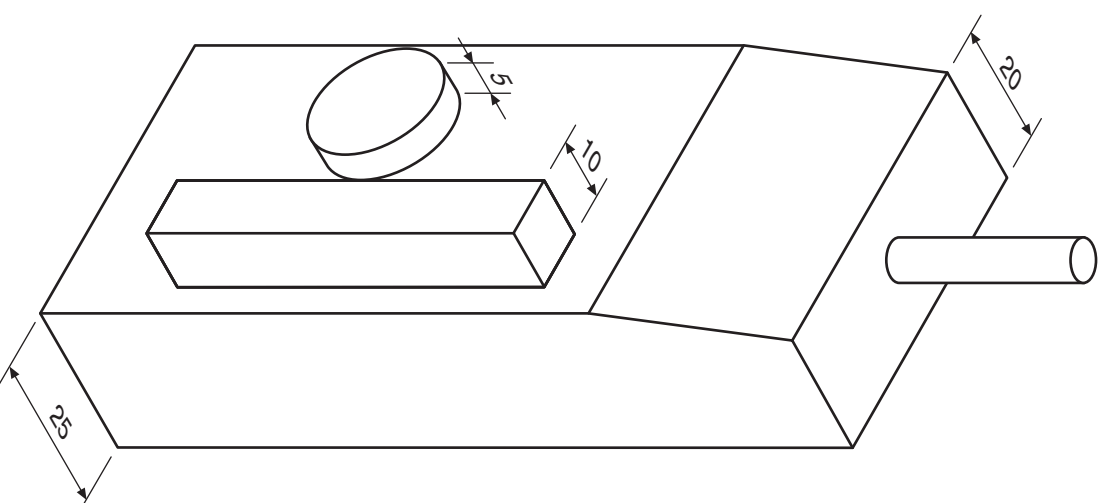
(9 marks)



Plan



Elevation



Isometric View



End Elevation

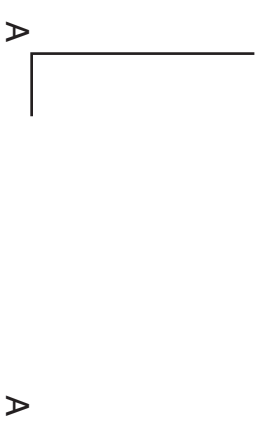
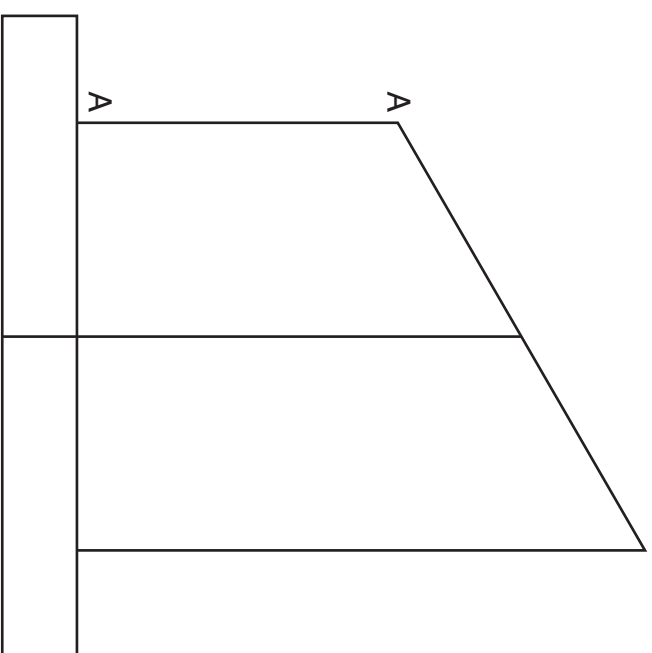
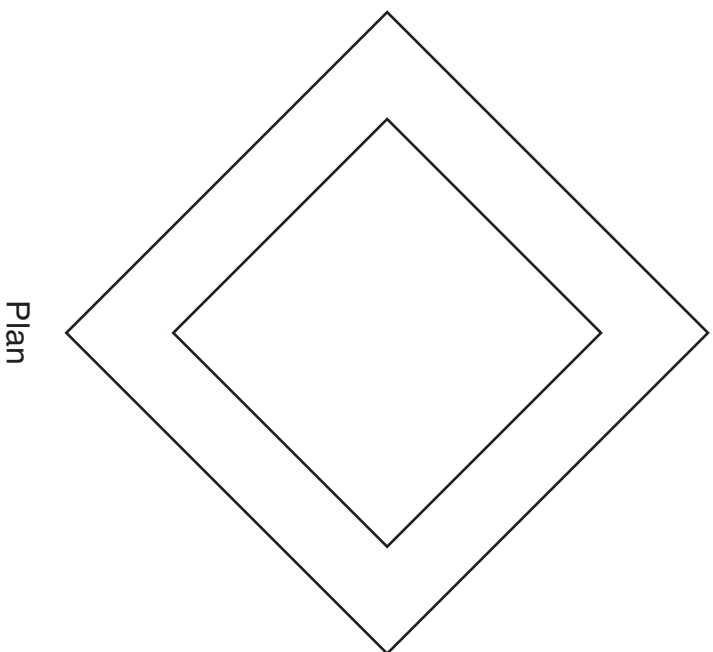
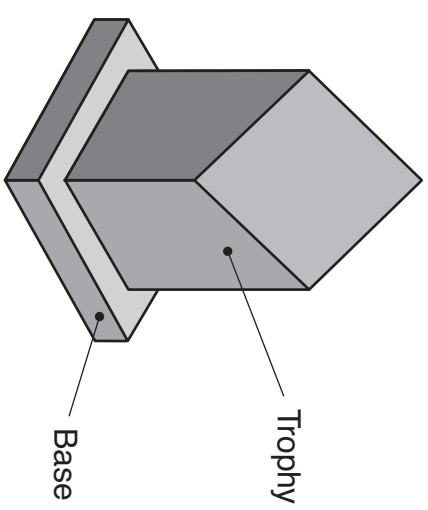
a	
b	
c	
d	
e	
f	
g	
h	
i	
j	
k	
l	
m	
n	

6

The plan and end elevation of a sports trophy are given. An illustration is shown opposite.

Draw, in the positions indicated:

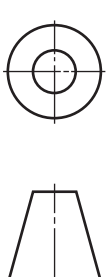
- (a) the elevation;
 - (b) the development of the sides of the trophy, excluding the base, opened on seam **A-A**.
- Show all hidden detail. (9 marks)**



Development

Elevation

End Elevation

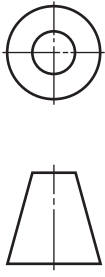


a	
b	
c	
d	
e	
f	
g	
h	
i	
j	
k	
l	
m	
n	

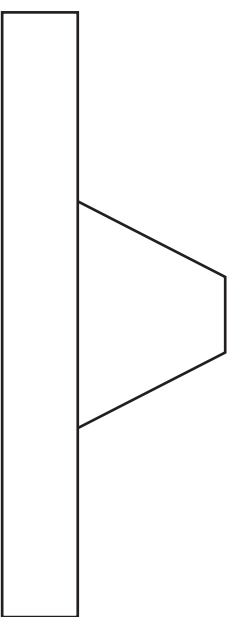
The elevation and end elevation of the lid and base that make up a jewellery box are given.
Draw, in the position indicated, the exploded isometric view of the jewellery box showing clearly the inside of the base.

Do not show hidden detail.

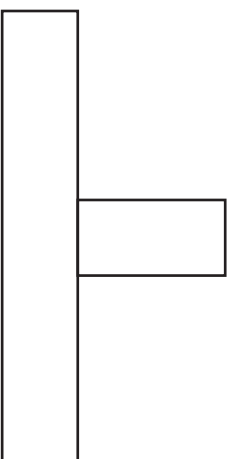
(13 marks)



Lid

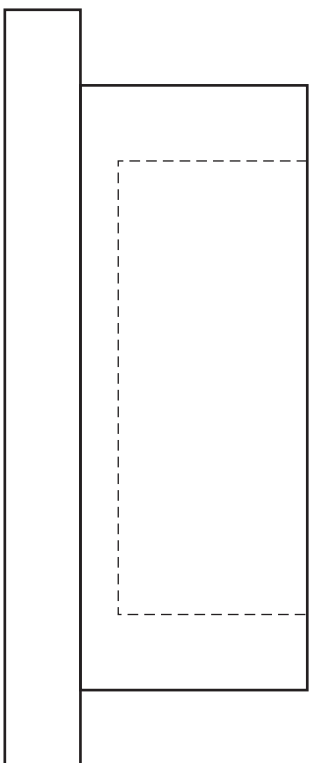


Elevation



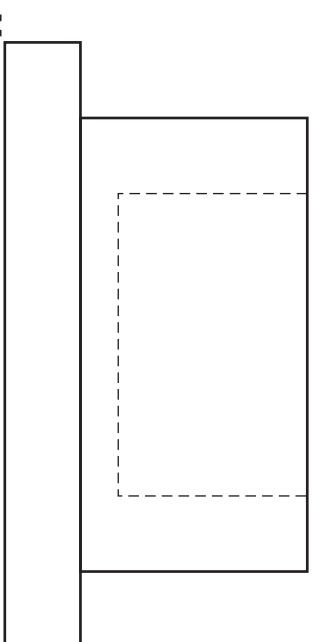
End Elevation

Base



Elevation

X



End Elevation

X

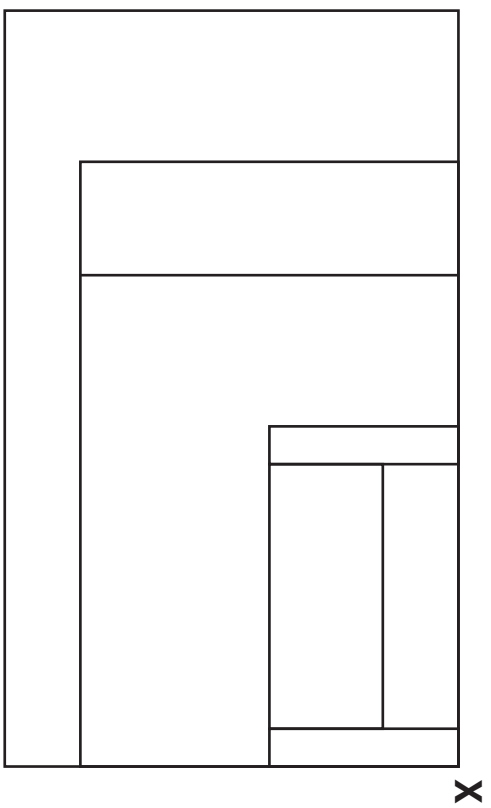
<i>a</i>	
<i>b</i>	
<i>c</i>	
<i>d</i>	
<i>e</i>	
<i>f</i>	
<i>g</i>	
<i>h</i>	
<i>i</i>	
<i>j</i>	
<i>k</i>	
<i>l</i>	
<i>m</i>	
<i>n</i>	



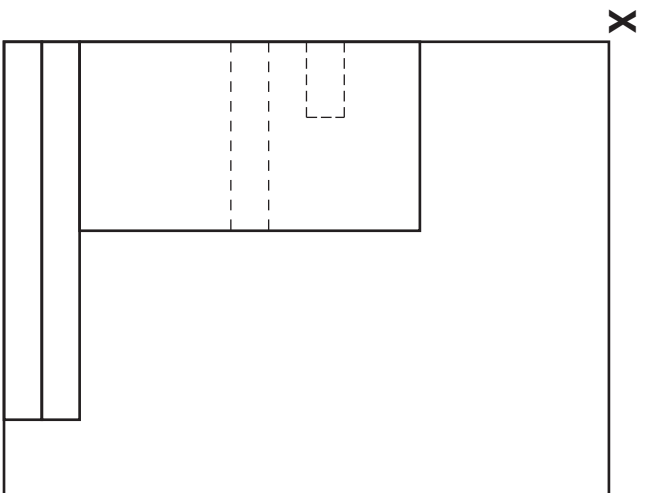
Exploded Isometric

The elevation, end elevation and plan of a raised patio and barbecue are given.

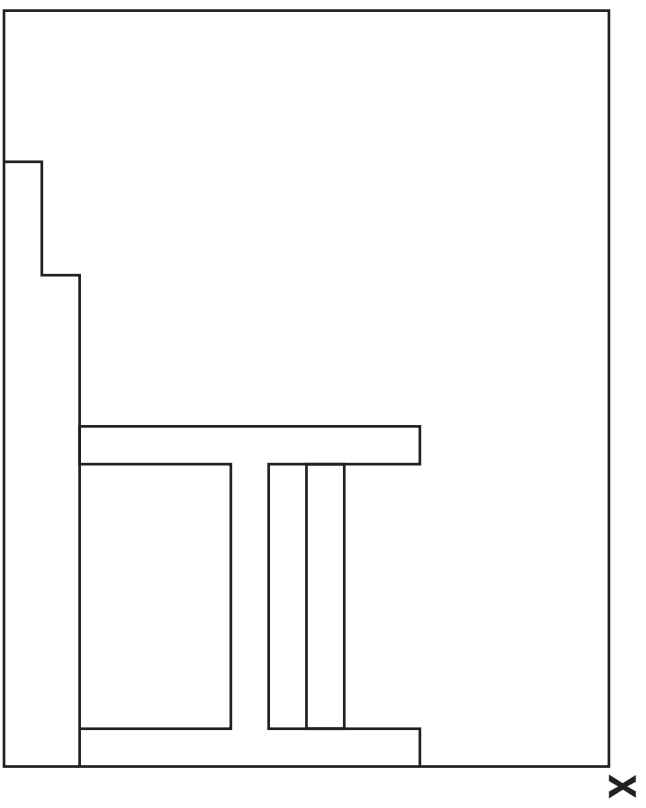
Draw, to the given scale, in the position indicated, the planometric view of the patio and barbecue.
Do not show hidden detail. (11 marks)



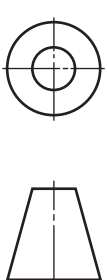
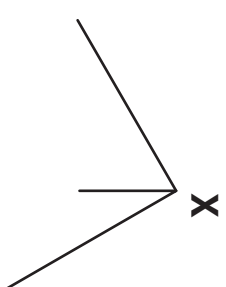
Plan



End Elevation



Elevation



<i>a</i>	
<i>b</i>	
<i>c</i>	
<i>d</i>	
<i>e</i>	
<i>f</i>	
<i>g</i>	
<i>h</i>	
<i>i</i>	
<i>j</i>	
<i>k</i>	
<i>l</i>	
<i>m</i>	
<i>n</i>	

The exploded elevation and end elevation of a USB pen drive and cap are given. An illustration of the exploded pen drive is shown opposite.

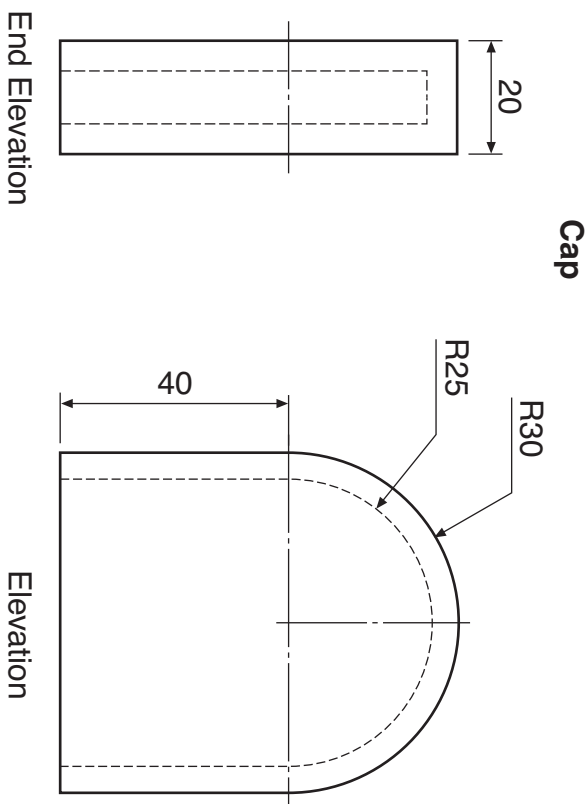
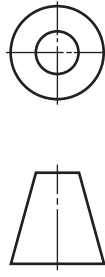
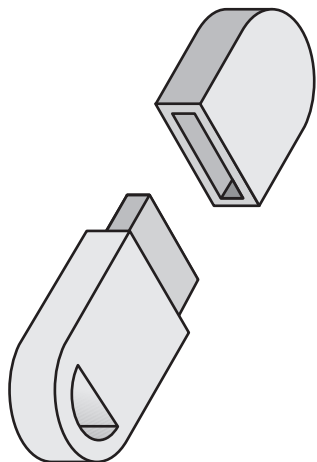
Draw, in the position indicated, using the given dimensions:

(a) the **assembled** elevation of the pen drive and cap;

Show all hidden detail.

(b) the **sectional end elevation on A-A** of the assembled pen drive and cap.

Do not show hidden detail. (12 marks)

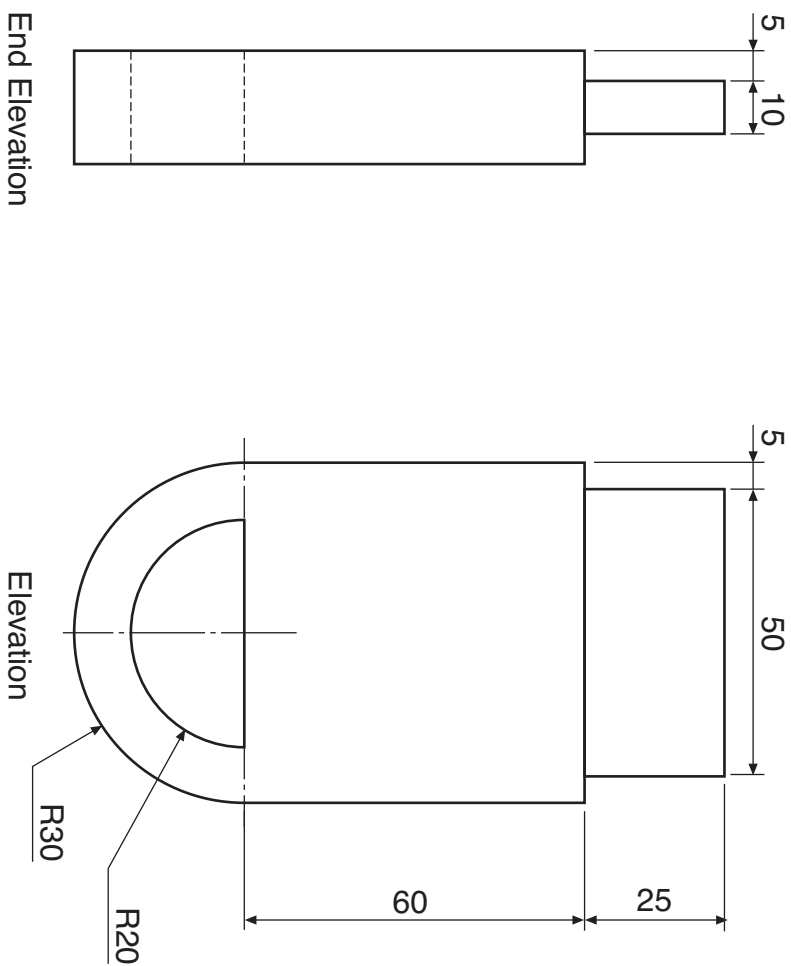


a	
b	
c	
d	
e	
f	
g	
h	
i	
j	
k	
l	
m	
n	



Sectional End Elevation A-A

Elevation



Not to Scale

[BLANK PAGE]