

STAPLE HERE

FOR OFFICIAL USE

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**1330/403**

NATIONAL QUALIFICATIONS  
2008

WEDNESDAY, 21 MAY  
1.00 PM – 2.45 PM

GRAPHIC COMMUNICATION  
STANDARD GRADE  
Credit Level

Fill in these boxes and read what is printed below.

Full name of centre				Town			
<input type="text"/>				<input type="text"/>			
Forename(s)				Surname			
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Date of birth		Scottish candidate number				Number of seat	
Day	Month	Year					
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1 110 marks are allocated to this paper: 40 marks for Knowledge and Interpretation  
70 marks for Drawing Abilities

- 2 Answer all questions.
- 3 Read each question carefully before you answer.
- 4 Written answers may be in **ink** or **pencil**.
- 5 Drawings and sketches **must be in pencil**.
- 6 Sketches need only be in line form—do not spend time rendering.
- 7 Dimensions are given in millimetres or as stated.
- 8 Orthographic drawings are in third angle projection.
- 9 For each question, the element being tested and the mark allocation are shown in brackets, eg (DA 5) means a question on Drawing Abilities worth 5 marks.
- 10 **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).

	KI	DA
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Total Marks		



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(a) Describe the main difference between animation and simulation.

Answer .....

..... **KI 1**

(b) Describe how computer animation could be used to help with the construction of flatpack furniture.

Answer .....

..... **KI 1**

(c) State **two** advantages of using a simulator when training airline pilots.

1 .....

.....

2 .....

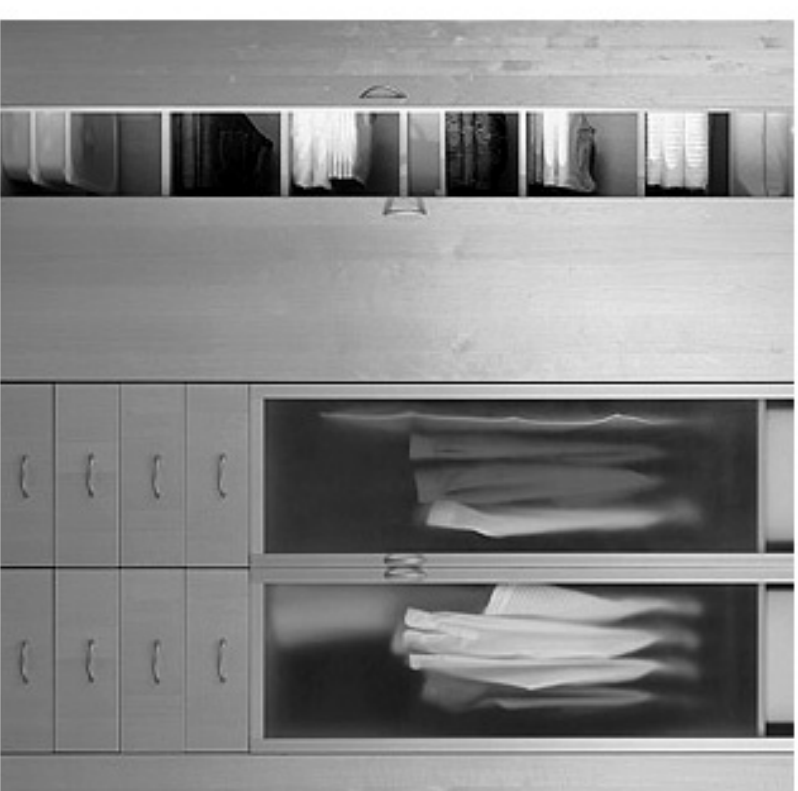
..... **KI 2**

(d) State how computer simulation could be used in the design of new car body shapes.

Answer .....

..... **KI 1**

**Total (KI 5)**



Flatpack Wardrobe



Computer Simulator

An interior designer used standard colour theory for the colour scheme in a new toy store.

(a) Complete the table by filling in the blank areas.

Area	Colour	Reason for choice
Interior walls	<i>Yellow</i>	
Checkout chairs and display cabinets	<i>Red</i>	
Worktops at the tills		To be in harmony with the walls
Floor		To be in contrast with the walls
First Aid Room signs and door		Associated with safety

KI 5

(b) Describe the effect created by the colour scheme chosen for this toy store.

Effect ..... KI 1

(c) State whether the walls are an advancing or a receding colour.

Answer ..... KI 1

(d) Describe how the continual use of the same two colours in the toy store logo and in all promotional materials relating to the toy store are an advantage to the company.

Description ..... KI 1

(e) State the term used to describe the gradual change that occurs when a flat colour changes from a light to a dark version of that colour.

Term ..... KI 1

Total (KI 9)

Computers are now widely used by many companies for all their graphic needs.

(a) Other than speed of production, describe **three** advantages that would be gained if a company uses CAD.

1 .....

.....

2 .....

.....

3 .....

KI 3

(b) Other than hardware costs, state **three** disadvantages to the company of using CAD for new design production.

1 .....

.....

2 .....

.....

3 .....

KI 3

(c) State **two** input devices that could be used to transfer existing manual drawings to the computer's memory.

Device 1 .....

Device 2 .....

KI 2

(d) State the name given to the type of model shown at P.

Model P .....

KI 1

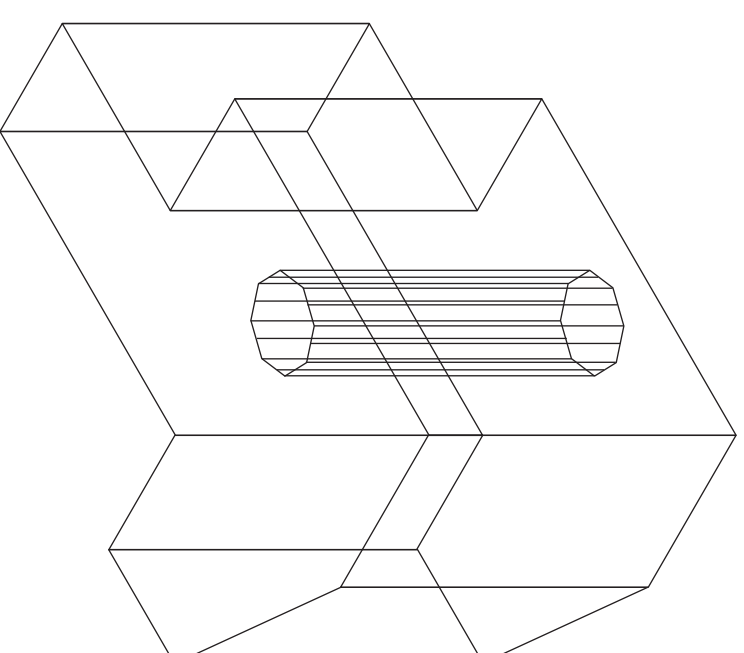
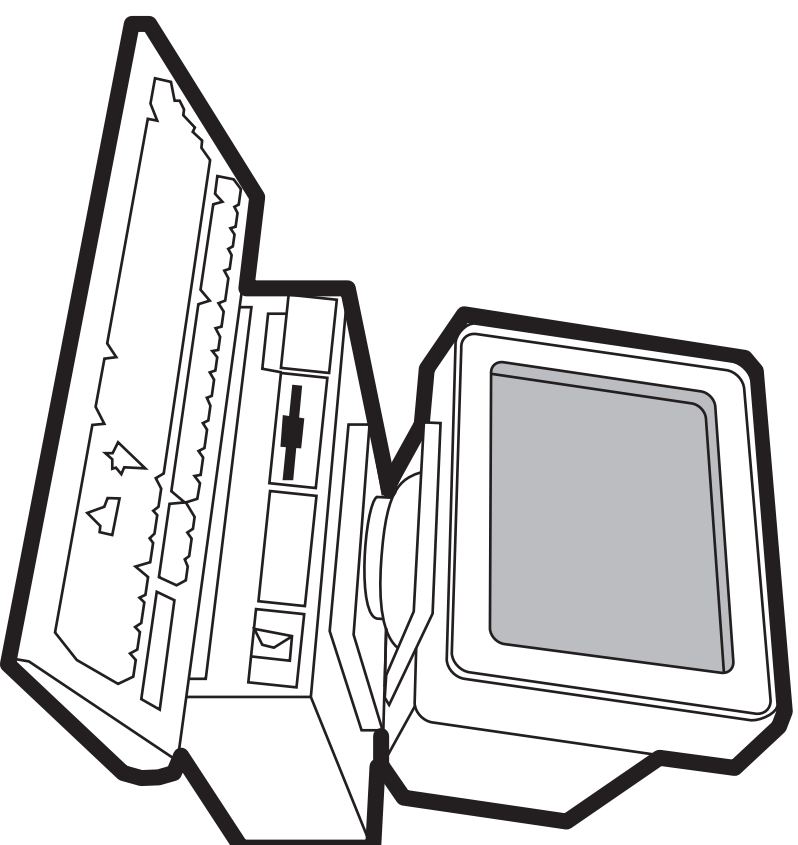
(e) State **two** other types of computer-generated model.

1 .....

2 .....

KI 2

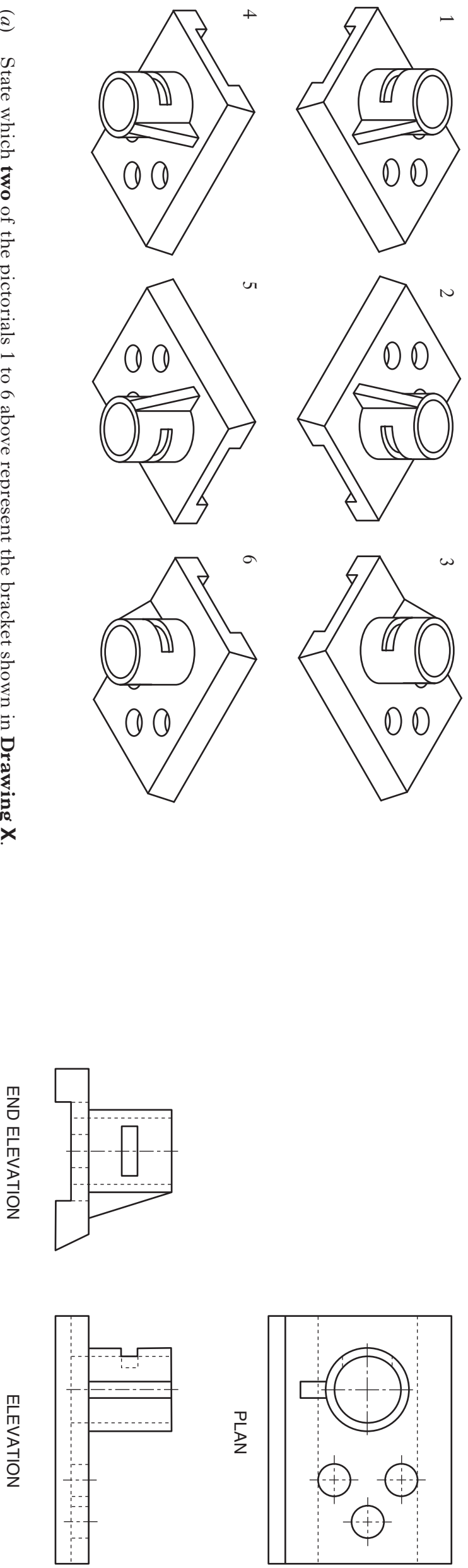
Total (KI 11)



Model P

The elevation, end elevation and plan of a bracket are shown in **Drawing X**.

**DRAWING X**



(a) State which **two** of the pictorials 1 to 6 above represent the bracket shown in **Drawing X**.

Answer 1 ..... Answer 2 .....

**KI 2**

(b) State the name given to the type of pictorials shown above.

Answer .....

**KI 1**

(c) State the names of **three** other types of pictorial that could have been used to draw the bracket.

1 ..... 2 ..... 3 .....

**KI 3**

(d) Eight sectional views 7 to 14 are given opposite.



State which **two** are correct sections of the bracket.

Answer 1 ..... Answer 2 .....

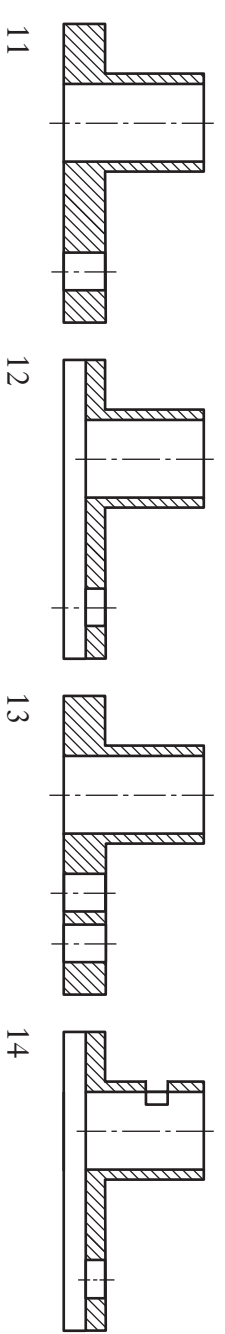
**KI 2**

(e) On **Drawing X** and using the correct BSI convention for dimensioning, draw on the dimensions for the overall length to the elevation and the overall breadth to the plan.

Answer 1 ..... Answer 2 .....

**KI 2**

**Total (KI 10)**



Design companies use many different software packages and output devices.

(a) State the type of software package that would be used for the following.

**Do not give commercial names.**

(i) Producing an advertising leaflet containing text and graphics

Answer .....

(ii) Producing a fully dimensioned working drawing

Answer .....

(iii) Producing a fully rendered graphic of a new house design

Answer ..... KI 3

(b) State **two** output devices that could be used to obtain hard copies of a computer rendered graphic.

Device 1 ..... Device 2 ..... KI 2

**Total (KI 5)**



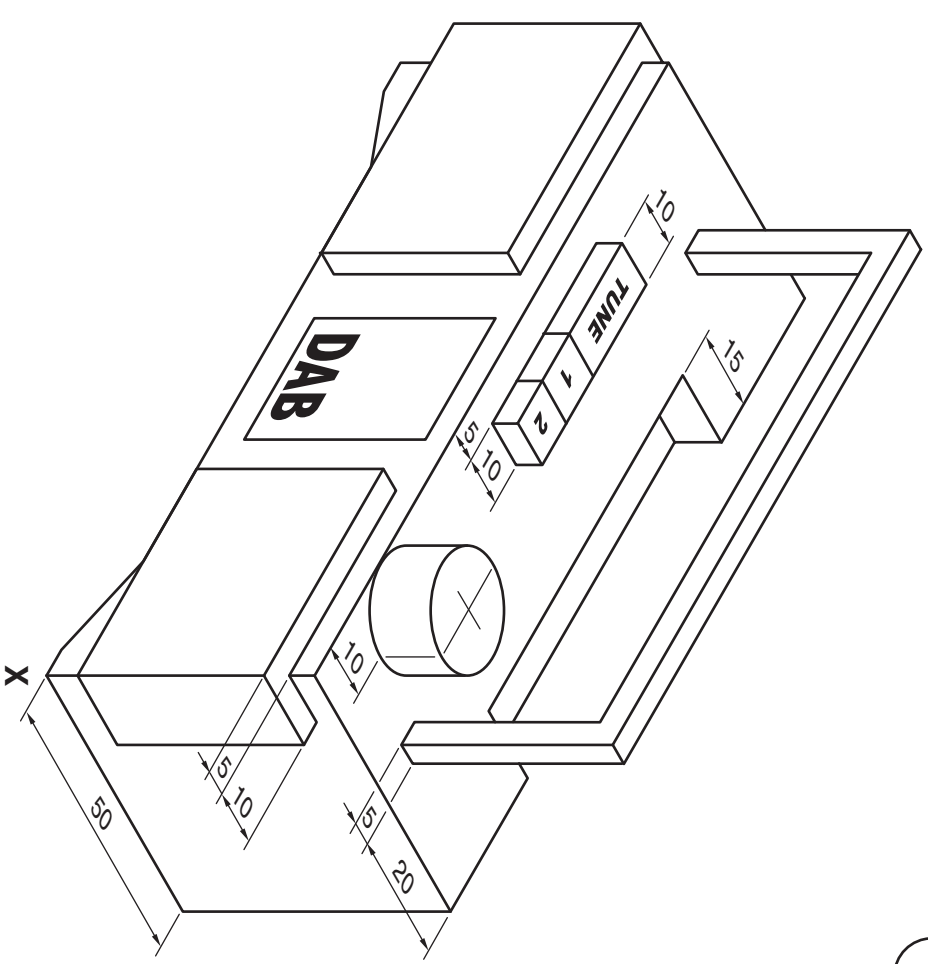
The elevation of a DAB portable radio is given. A pictorial view is also shown.

**Draw:**

- (a) the complete end elevation of the radio projected from the elevation;
- (b) the complete plan.

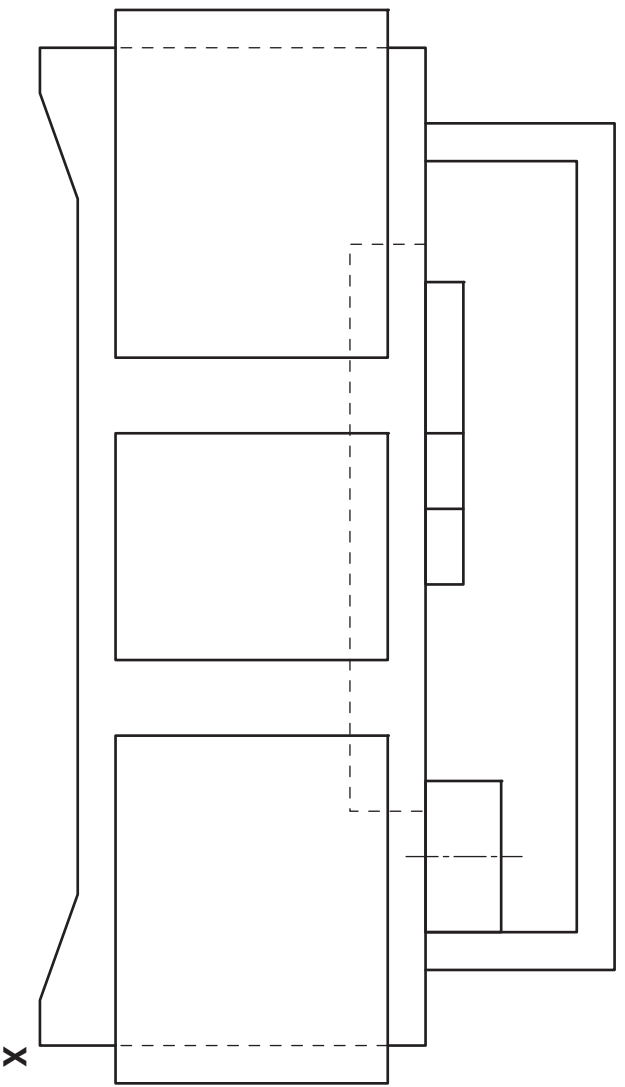
**Show hidden detail.**

**Total (DA 12)**



**NOT TO SCALE**

**PLAN**



**ELEVATION**

X



**END ELEVATION**

X

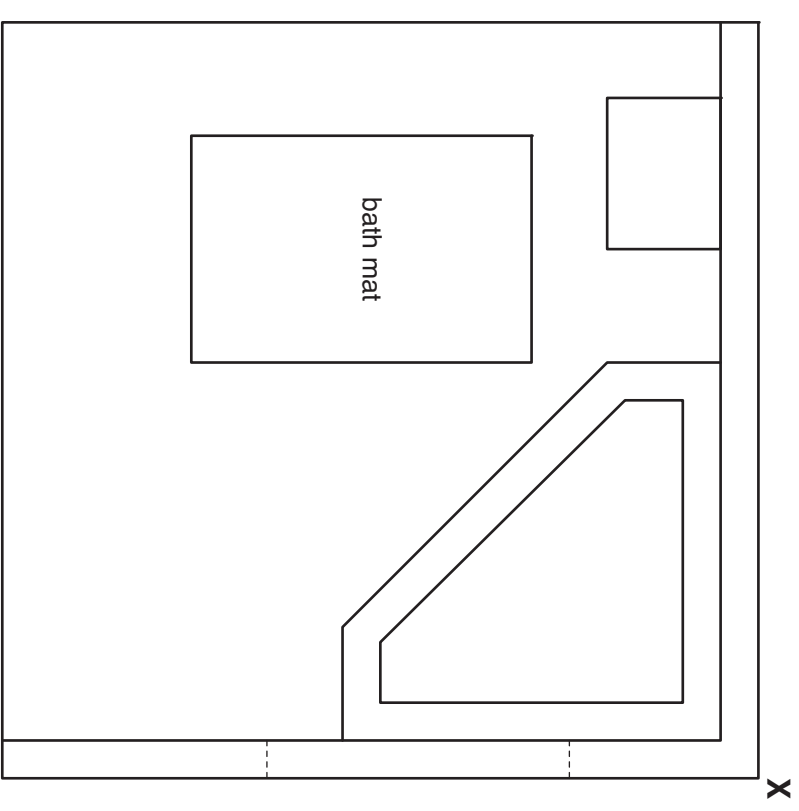
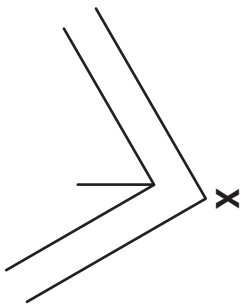


The elevation, end elevation and plan of a bathroom are given.  
**Draw a planometric view of the bathroom, using the given start X.**

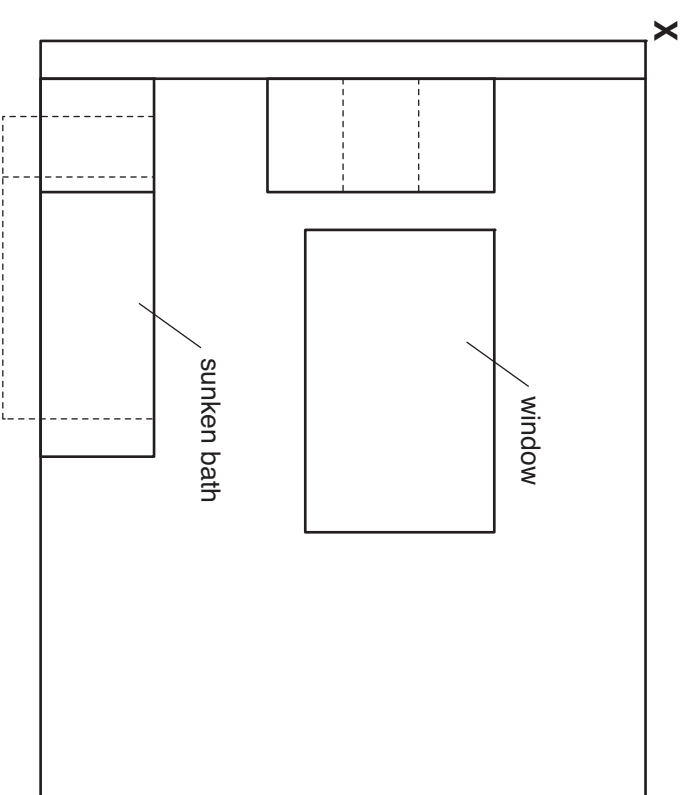
Take all sizes from the given views.

**Do not show hidden detail.**

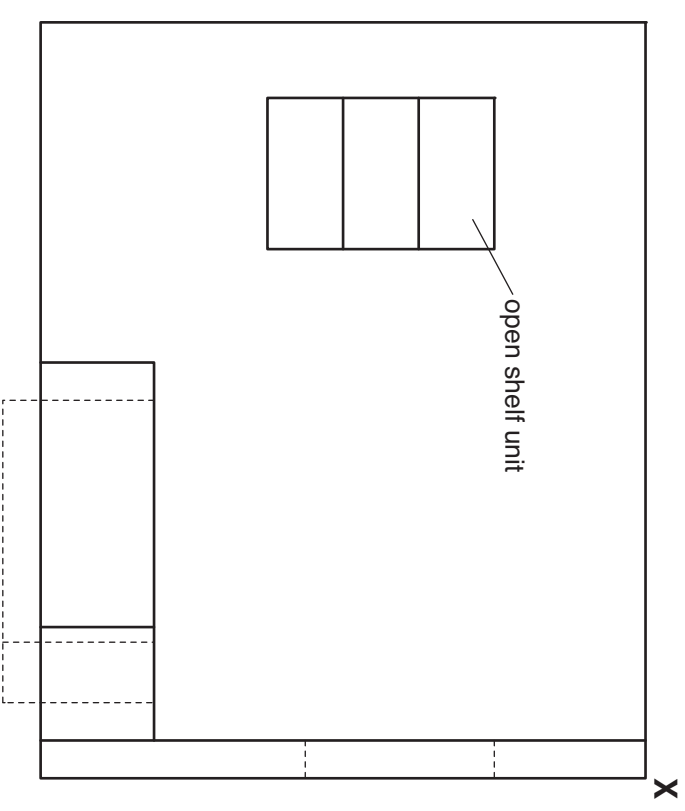
**Total (DA 14)**



PLAN



END ELEVATION



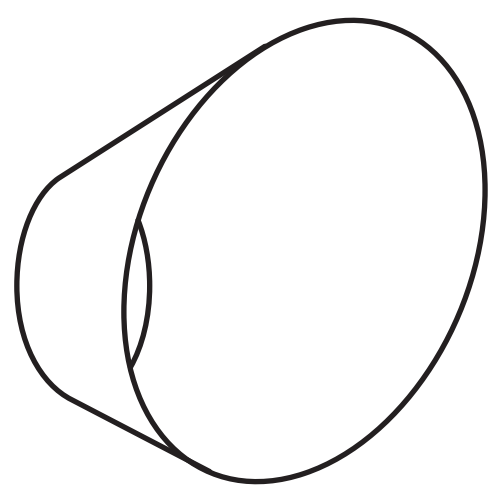
ELEVATION

The elevation of a sauce dish is given. A pictorial of the sauce dish is also shown.

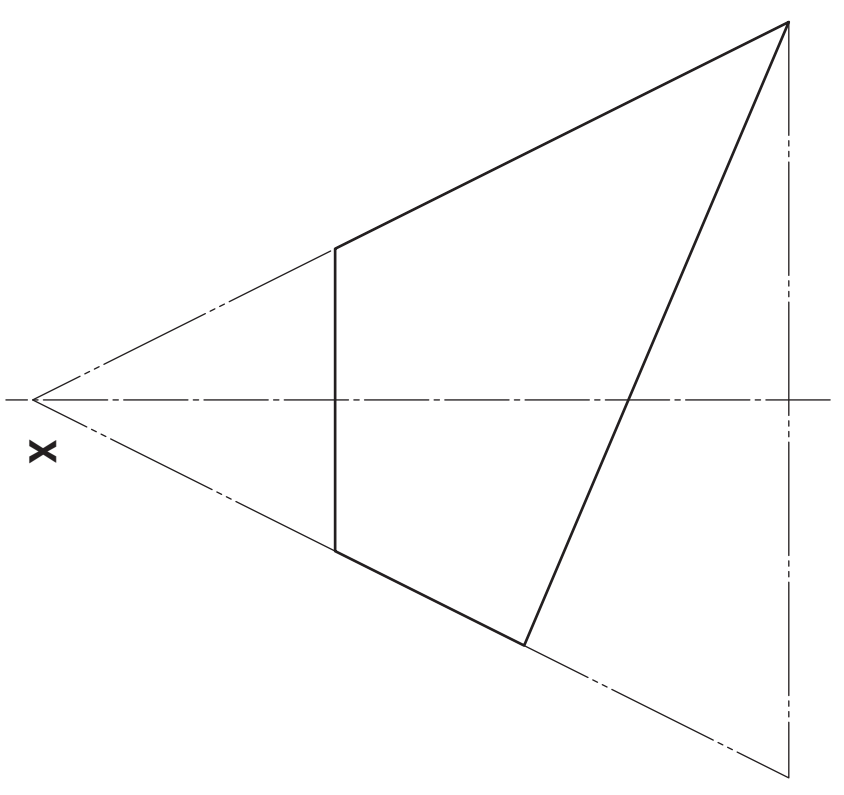
**Draw**, from the given elevation:

- (a) the end elevation;
- (b) the surface development of the sides.

DA 7  
 DA 7  
 Total (DA 14)



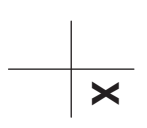
PICTORIAL VIEW  
(NOT TO SCALE)



ELEVATION



END ELEVATION



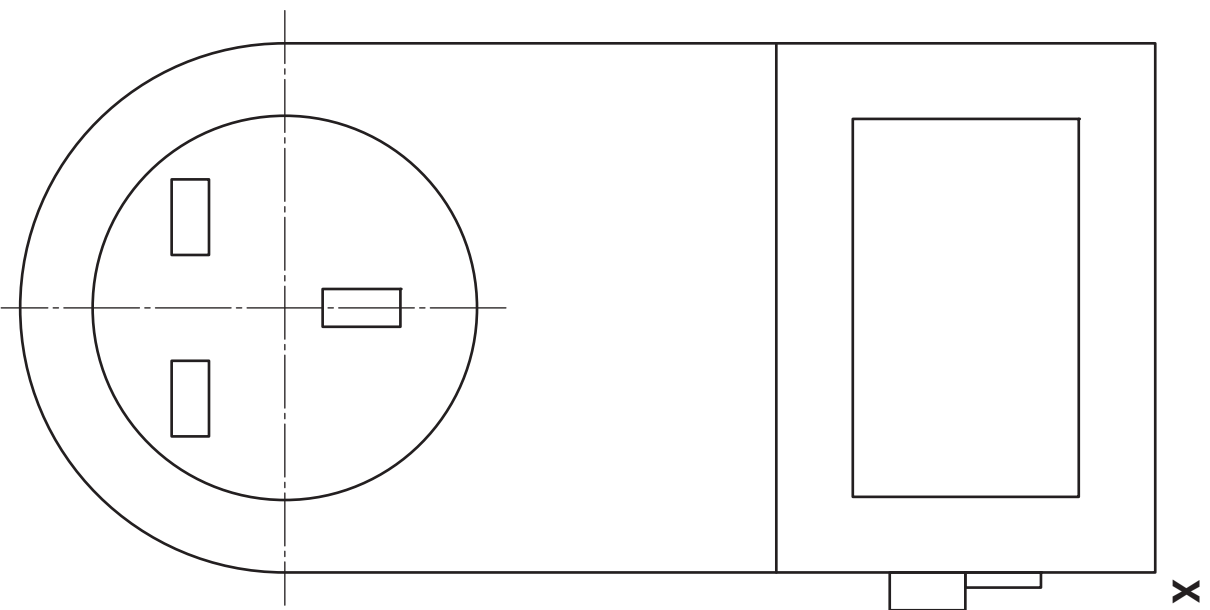
SURFACE DEVELOPMENT OF SIDES

The elevation and end elevation of a timer switch are given.

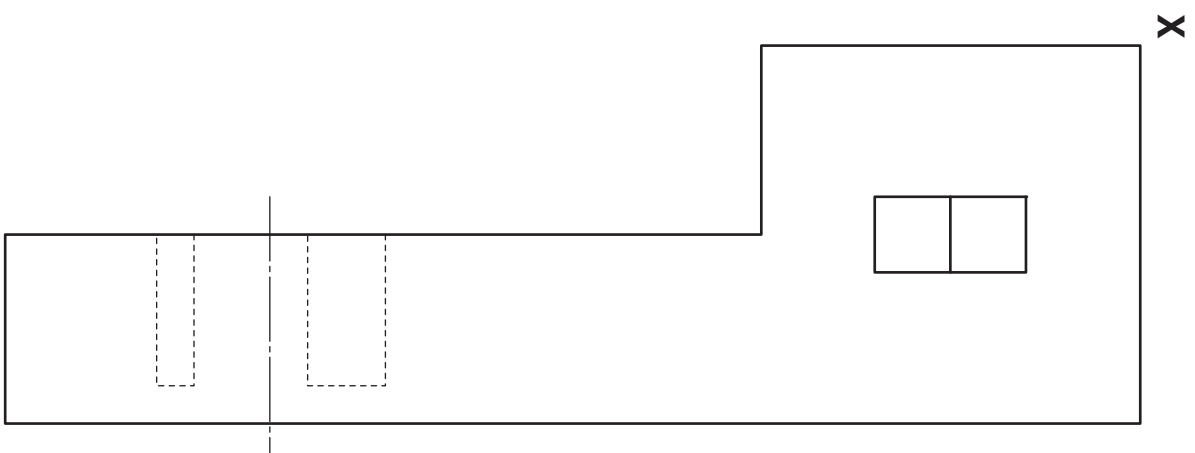
**Draw**, full size, the **isometric** view of the timer switch, using the given starting corner **X**.

**Do not show hidden detail.**

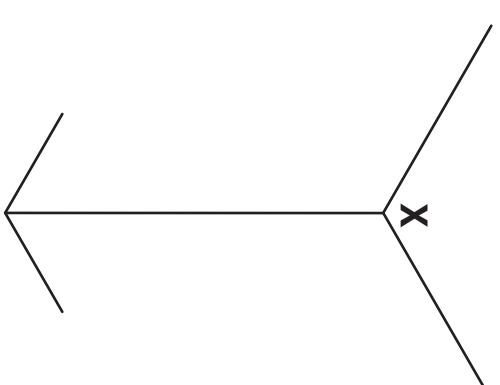
**Total (DA 16)**



ELEVATION



END ELEVATION



ISOMETRIC VIEW

An exploded isometric view and detail drawings of the components of an ink roller are shown.

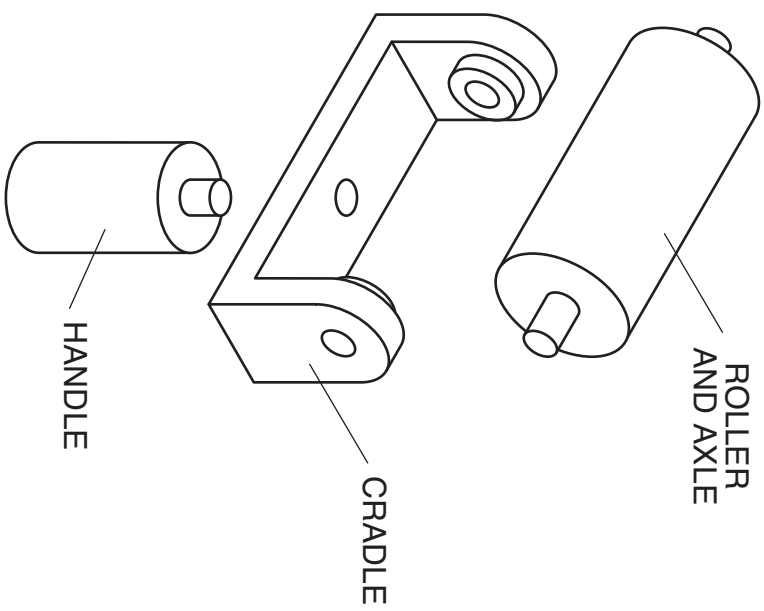
The incomplete end elevation of the assembled ink roller is given.

- (a) Complete the end elevation. **Show all hidden detail.** DA 4
- (b) Draw the sectional elevation on **X-X**. DA 10

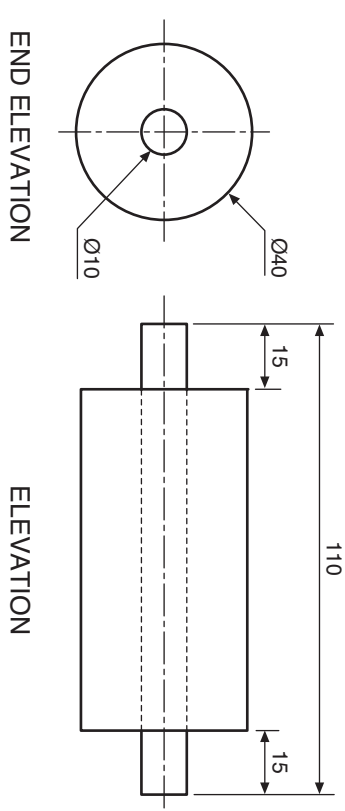
**Do not show hidden detail.**

**Do not section the roller and axle.**

**Total (DA 14)**



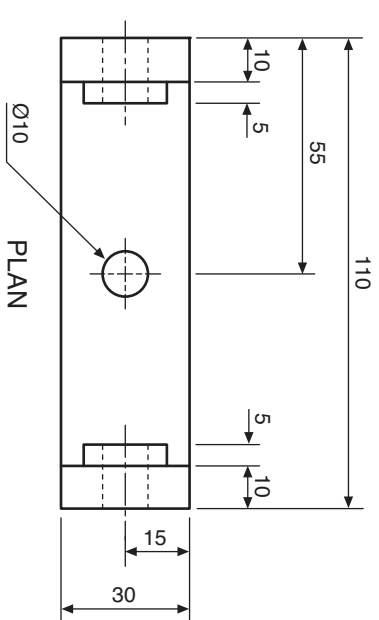
EXPLODED ISOMETRIC  
(NOT TO SCALE)



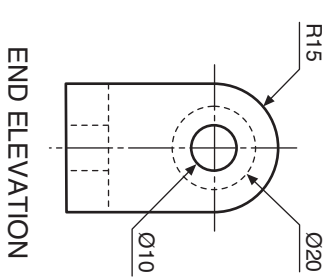
END ELEVATION

ELEVATION

ROLLER AND AXLE



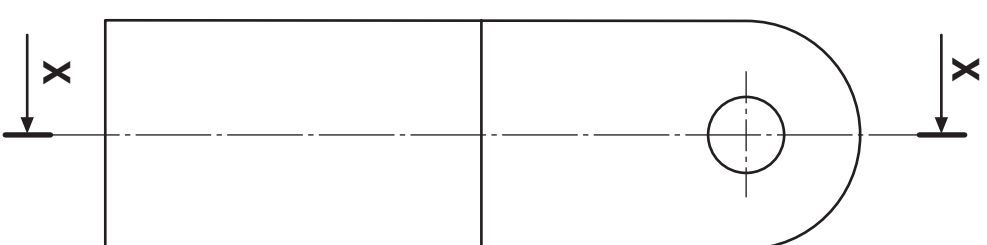
PLAN



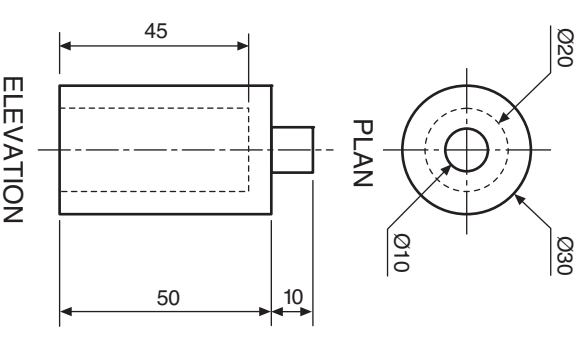
END ELEVATION

ELEVATION

CRADLE



END ELEVATION



PLAN

ELEVATION

HANDLE

SECTIONAL ELEVATION ON X-X