

Candidate 7 evidence

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Total marks — 90
Attempt ALL questions

For questions 1 (a) to (f), refer to the information provided on supplementary sheets 1 and 2.

A three-fold leaflet has been created for the independent cinema, Cinemazy.



1. (a) Describe, giving **two** examples, how the graphic designer's use of contrast has enhanced the layouts.

2

left ^{green text}
 "There is contrast seen in the ~~the~~ ~~the~~ ~~the~~ on the far ~~left~~ which contrasts with the coloured ~~text~~ seen on the far left. This draws attention to the coloured ~~text~~ green, emphasising the members 40% off & drawing no attention to it.

"There is contrast seen in the rolls of film which are a natural, winking shape. These are on pages 1/2. These contrast with the straight red lines going diagonally over the pages, creating visual interest.

- (b) Describe, giving **two** examples, how the graphic designer has created rhythm to enhance the layouts.

2

- The designer has created rhythm seen in the repeated use of the red shade across the layout, making it more cohesive. This is seen in the diagonal red stripes and red text.
- The designer created rhythm by using the repeated sans serif text, seen in all paragraphs across the layout, creating consistency and aiding ease of reading.

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1. (continued)	
(c) Describe, giving two examples, how the graphic designer has used value in the layouts. <i>dark red</i> • The text text on page 2 "we support independent films" is dark in value and contrasts with the light background. Darker values also stand out more and catch attention. • The red twin and underline on page 3 is a light value which contrasts with the black background. It is not as light as the text, but it aids in drawing attention to the text without overpowering it.	2
(d) Describe, giving two examples, how the graphic designer has created depth in the layouts. • The transparent red strip alongside the full opacity red strips is layered over the rolls of film image on the left bottom corner, creating depth. • The central film roll is layered over the black box on the left and layered under the red film roll. This creates visual interest and depth.	2
(e) Describe, giving two examples, how the graphic designer has used alignment in the layouts. • The boxes on the far left range from white to black. They are vertically aligned with each other, creating order & structure. • The "www.cinemazy.co.uk" red text on the bottom of page 1 & 2 are horizontally aligned, making order and making it easier to navigate.	2
(f) Explain, giving one example, why the graphic designer has used emphasis in the layouts. • The use of the red text "independent" and the websites is an advancing colour and comes forward in the composition. This use of the colour emphasises the key points the designer wants the viewer to remember/look at, which is the selling point; the support INDEPENDENT FILMS	1

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MARGIN**1. (continued)**

The graphic designer created the logo for Cinemazy as a vector file and stored it in the cloud.



- (g) (i) Describe two advantages of creating the logo in the vector file format. **2**

- There is no loss of quality when scaled up or down.
- ~~It is a smaller file size saving space on the computer/~~ it is a smaller file size saving space on the computer/ loading time.

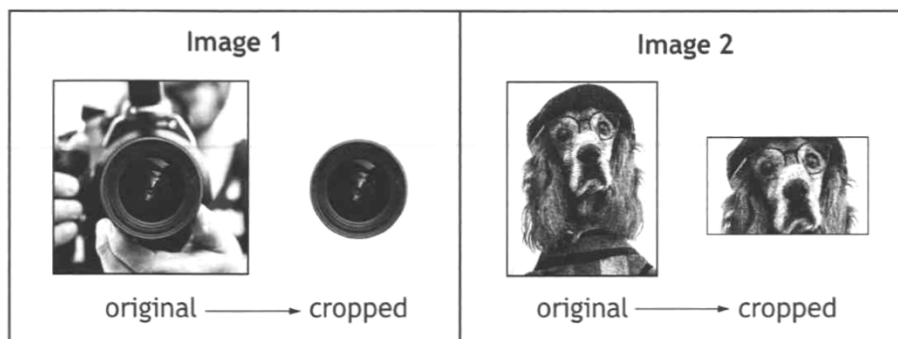
- (ii) Describe two advantages of cloud storage. **2**

- it enables remote working from anywhere
- it enables users to work collaboratively and access the same files ~~at~~ together to edit/look at.

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1. (continued)

The graphic designer has used cropping to edit the images used in the layouts.



(h) State the name of the crop applied to the images shown above.

2

(i) Image 1 full cropping

Image 2 Square cropping

(ii) Describe the effects that the two types of cropping have created within the layouts.

2

- ° image 2 has been cropped so the key content - the dog's face - is the only thing seen and irrelevant content is discarded.
- ° image 1 has been cropped fully allowing use of the image more versatile - it can be used for promoting cameras OR photography ~~instead of the camera~~.

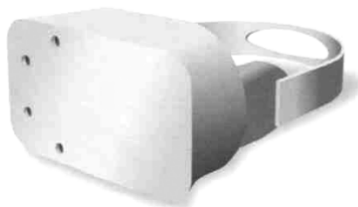
The graphic designer used placeholder text in the preliminary layouts.

(i) Explain one advantage to the graphic designer of using placeholder text.

1

- ° time is saved as the designer does not need to source the real text - it allows placement and formatting of text so that the real content can just be swapped in, saving time.

2. A tech company is developing a new virtual reality (VR) headset. A prototype is shown below.



Bottom-up modelling was used to create the VR headset components.

- (a) Describe the process of bottom-up modelling.

2

Bottom up modelling is where all components are modelled and saved individually, and then constrained together in an assembly using modelling constraints like mate, align, centre axis etc.

For questions 2 (b), c (i) and c (ii), refer to the information provided on supplementary sheet 3.

- (b) Explain the purpose of the detail view D.

1

detail view D shows how the part that goes around the head fits ~~around the~~ into the attachment piece that goes on the headset. it helps to understand what is going on better and how it assembles,

- (c) (i) State the name of the type of section shown at A-A.

which can be hard to see when not zoomed in

1

stepped section

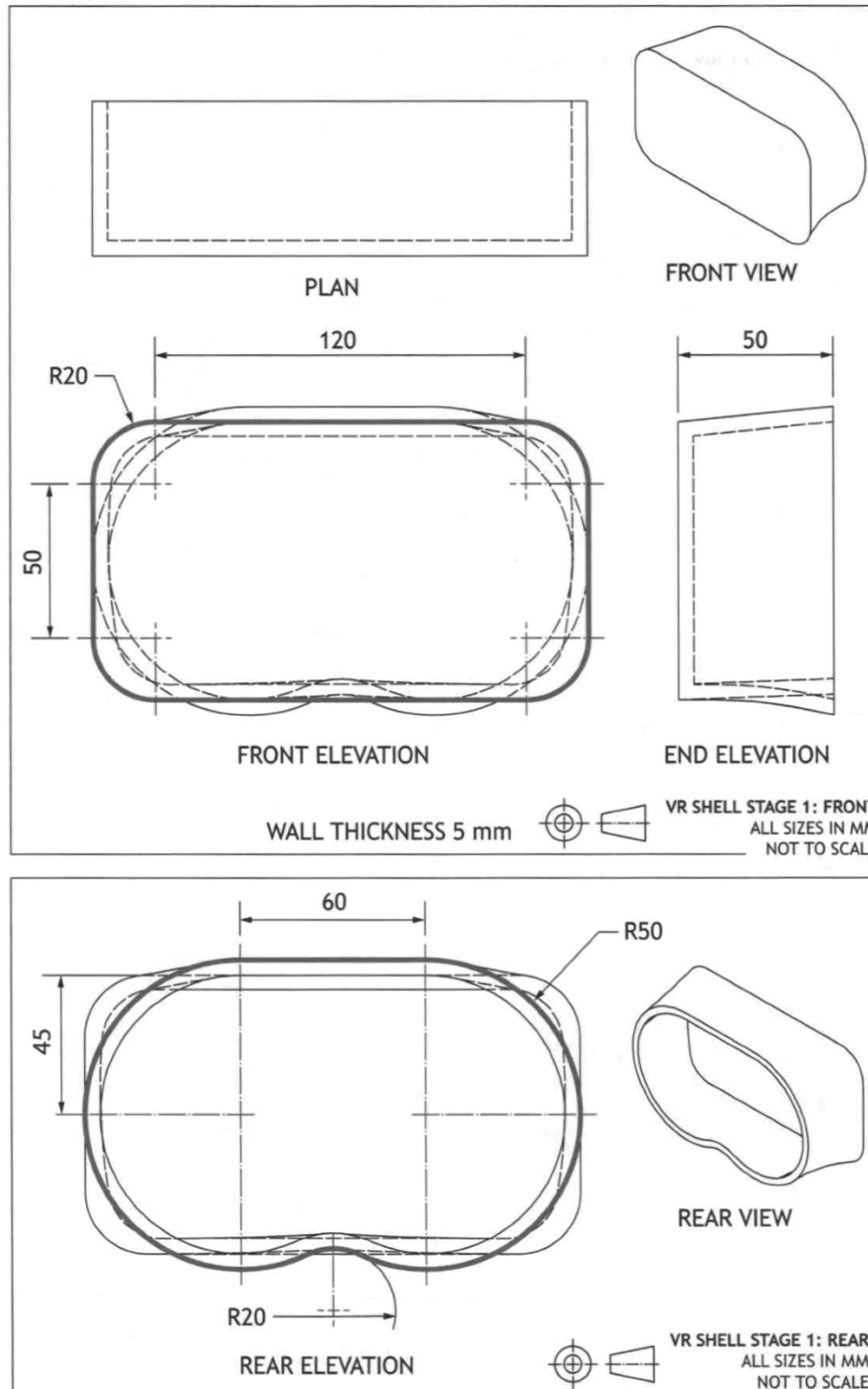
- (ii) State the name of the type of section shown at C.

1

revolved section

2. (continued)

Two drawings of stage 1 of the VR headset are shown below. The drawing at the top is an orthographic showing the front elevation, end elevation and plan. The second drawing is also of stage 1 of the VR headset shown from the rear to make the profile easier to see.

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2. (continued)

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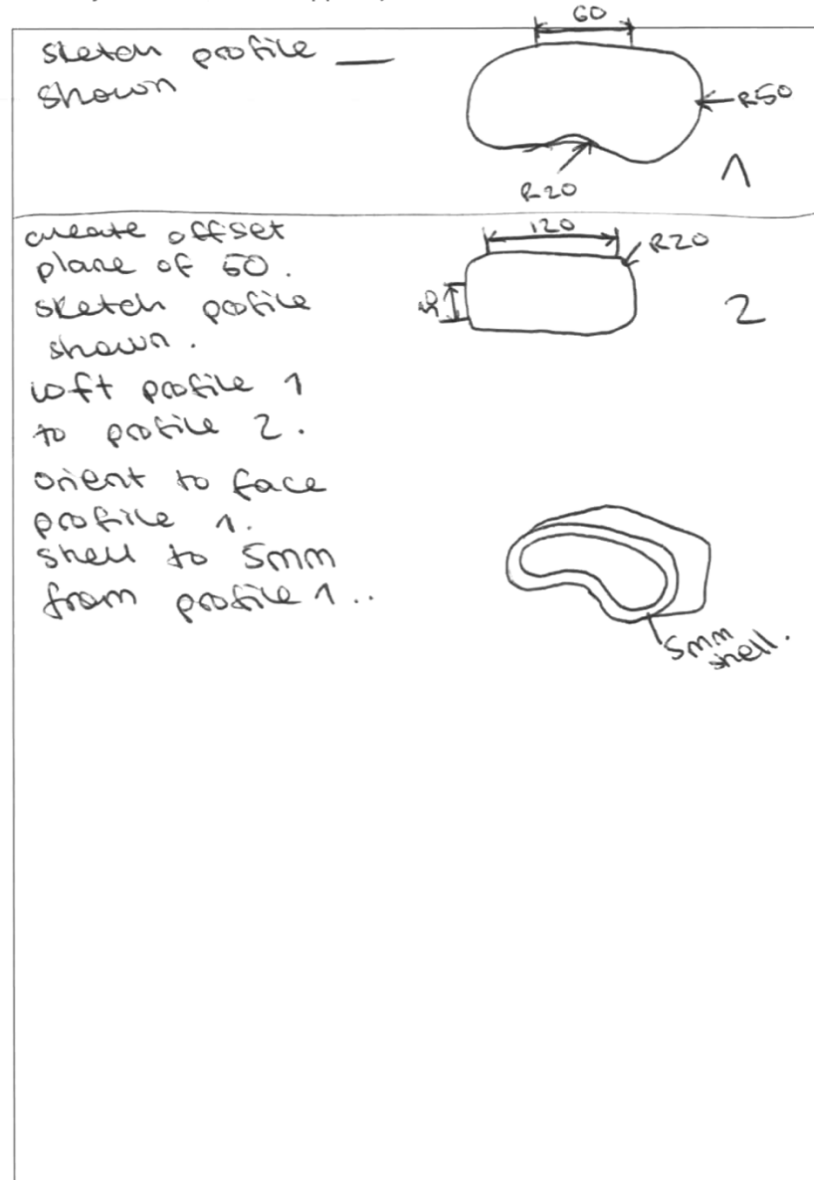
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- (d) (i) Describe the 3D CAD modelling techniques used to create stage 1 of the VR headset component, shown in the drawings opposite.

You must reference the dimensions in the drawing of the front and rear of the VR headset, shown opposite.

You may use sketches to support your answer.

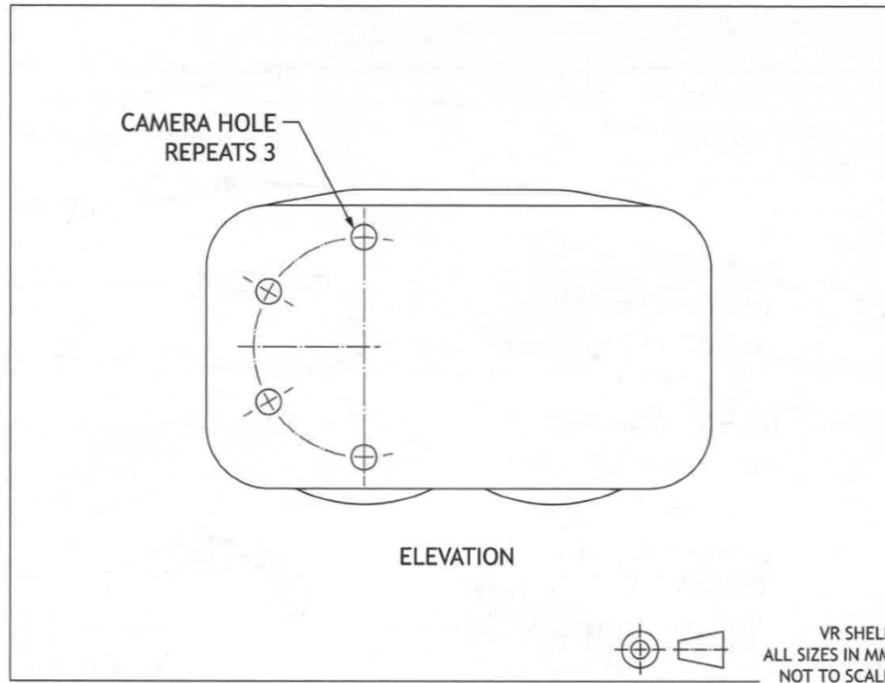
5



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2. (d) (continued)

In stage 2, a series of camera holes were added to the VR headset.



- (ii) State the name of the 2D CAD command used to create the repeated feature in the drawing above.

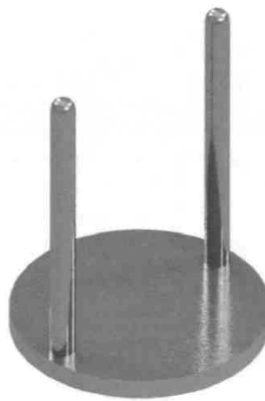
1

radial array

2. (continued)

A prototype for a VR controller charging stand is shown below.

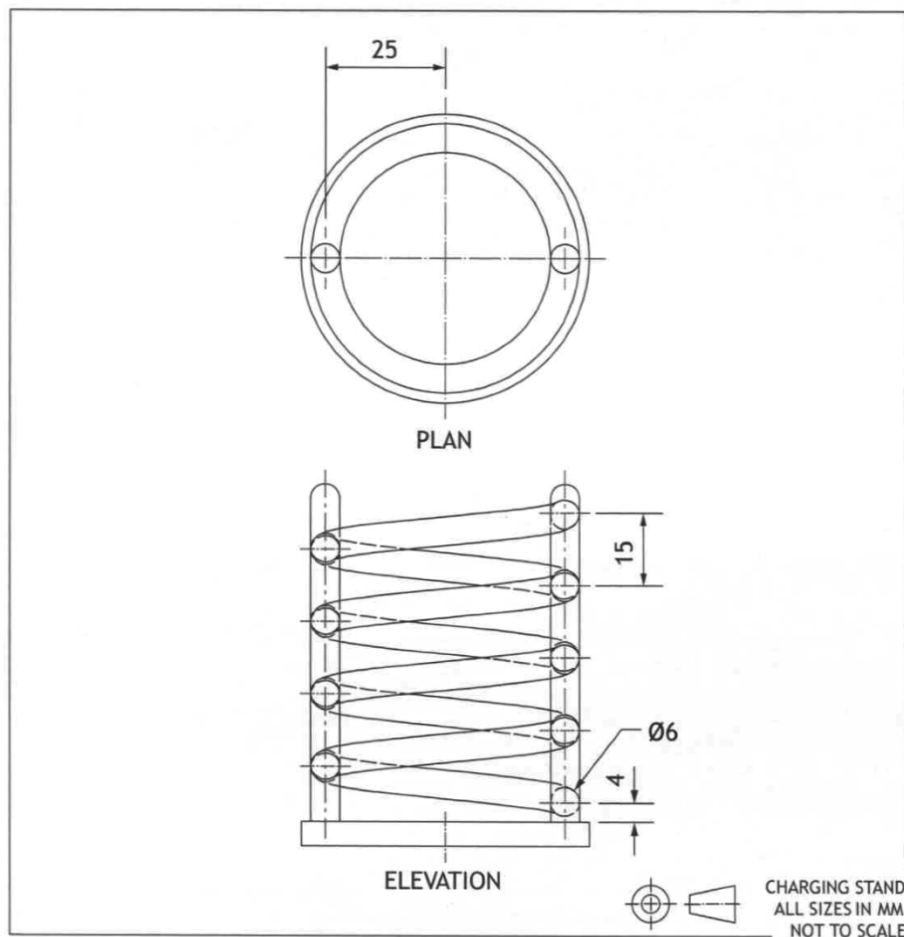
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Stage 1



Stage 2



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2. (continued)

- (e) Describe the 3D CAD modelling techniques used to add the feature in **Stage 2** of the prototype controller charging stand, shown opposite.

You must reference the dimensions in the drawing.

You may use sketches to support your answer.

3

Sketch profile shown → 

offset profile perpendicular to the base, ~~the~~ the centre of profile 4mm above base. ensure profile is in the centre of the rods. 

set pitch to 15mm, and height to 60mm. helix form so it creates a coil.

[Turn over]

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2. (continued)

The tech company hires freelance CAD technicians to create 3D models. They all use different CAD software.

- (f) (i) State a suitable file format the CAD technicians can use to share models. 1

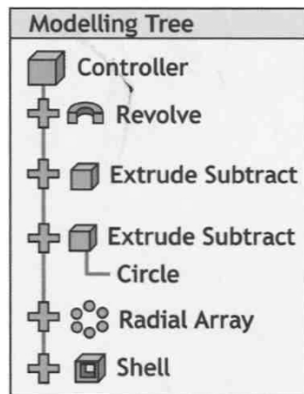
STEP

- (ii) Explain why using this file format is beneficial to the CAD technicians. 1

it allows them to share 3D models/files and the STEP file type is not only used with one software - it can be opened/edited in many different types.

An error was made during the controller modelling process.

** or a specific*



result with
modelling error

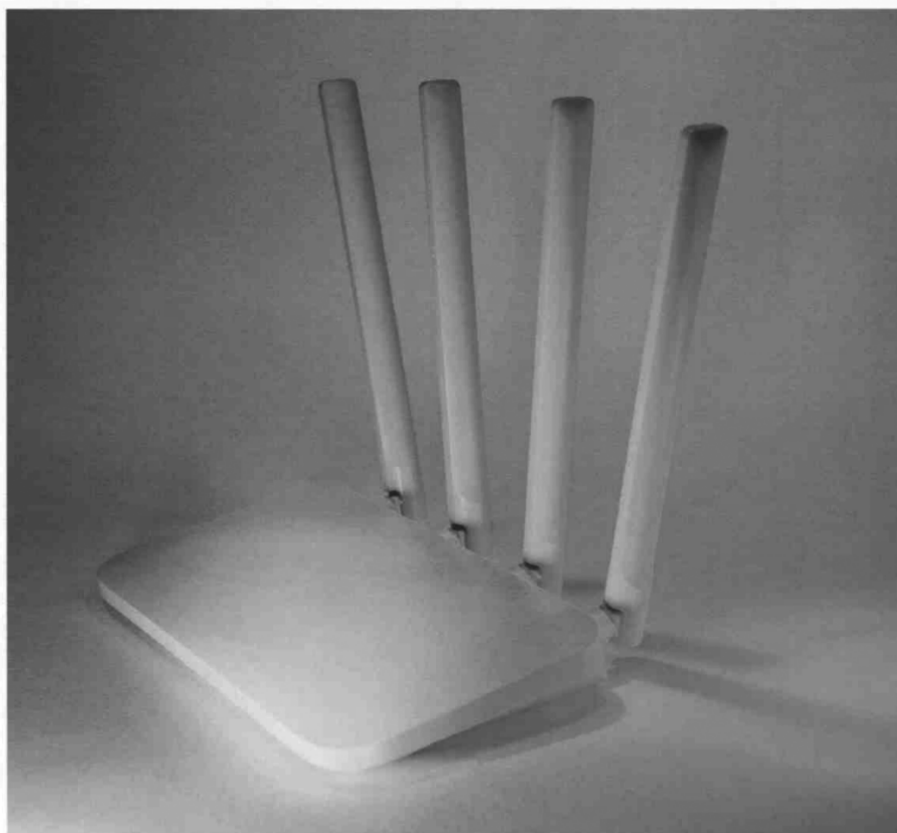


expected
end result

- (g) Describe the change that needs to be made to the modelling tree to fix the error and achieve the expected end result. 1

They will need to delete radial array, so shell goes first. then they will need to do radial array after shell, so there are clean nodes.

3. A wireless router is being developed using CAD.



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3. (continued)

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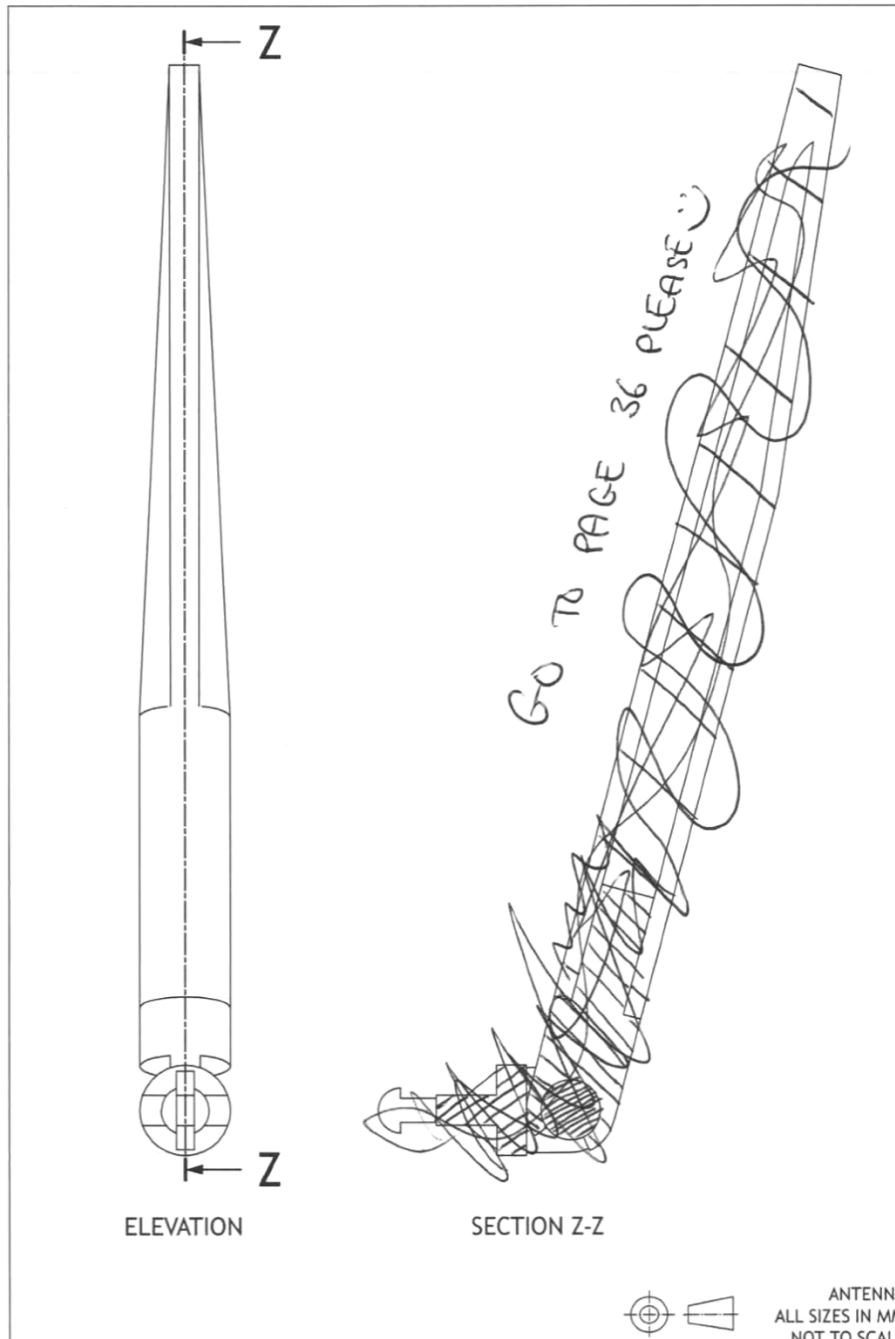
An incomplete sectional view of the wireless router antenna is shown below.

- (a) Complete the sectional view by adding appropriate hatching.

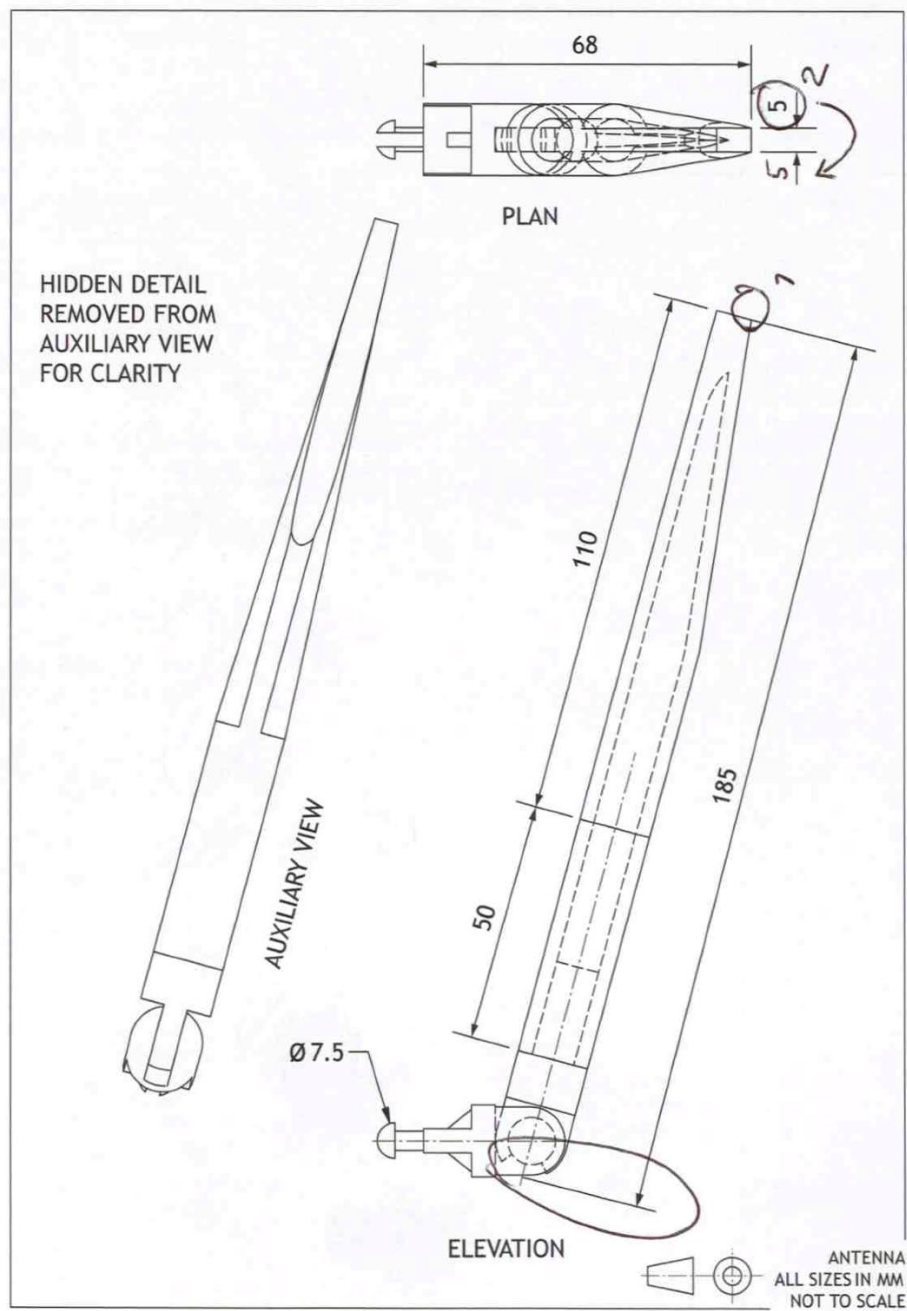
Use the information provided on **supplementary sheet 4**.

(Additional graphics, if required, can be found on *page 36*.)

4



3. (continued)

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3. (continued)

- (b) Identify **three** errors which are not correct to British Standard conventions in the drawing of the antenna, shown opposite.

3

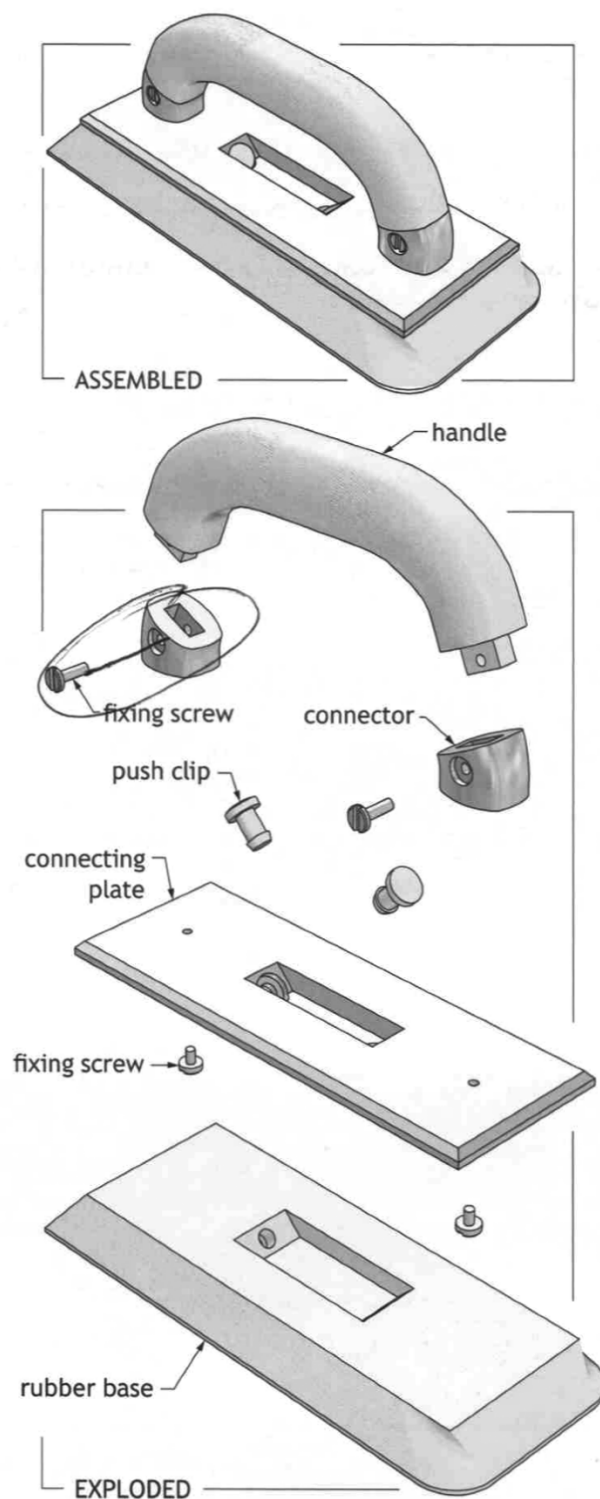
- 1 the line is touching the model drawing
- 2 the 5 should be on the other side.
- 3 it is not clear where the dimension ends on the model

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4. A tiling company has produced the assembled and exploded view of a grout float shown below.

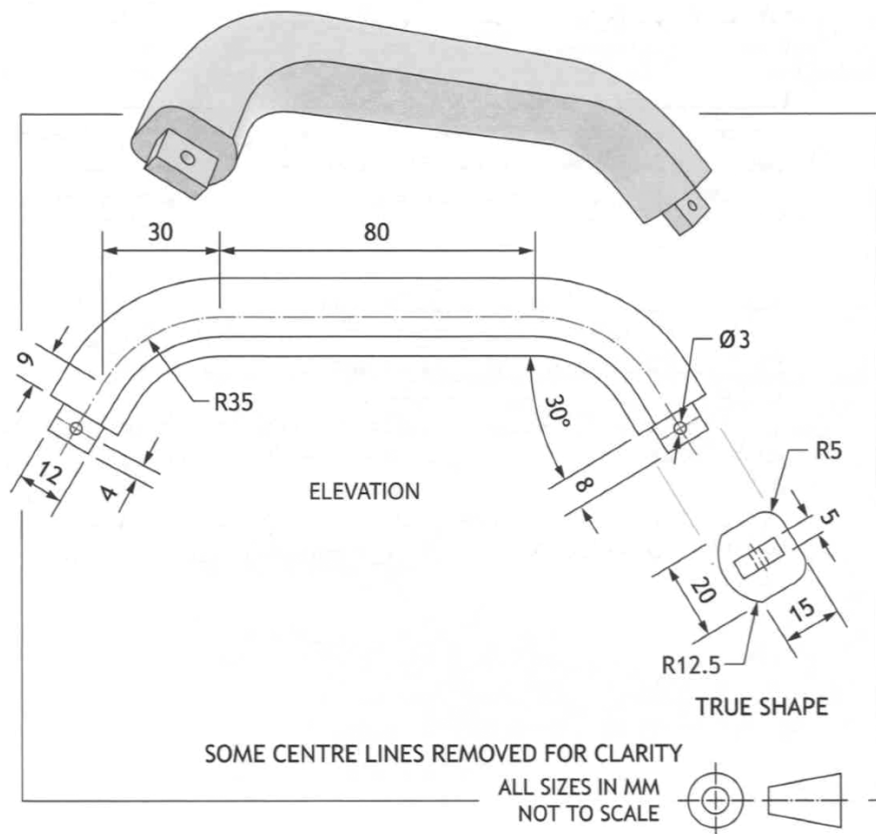
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4. (continued)			
(a)	(i) Describe two examples of good practice in the exploded view.	2	
	all components are fully separated and not touching each other the parts are are pulled away from where they would fit together - for example the screw can be seen that it inserts into that hole - the parts are not in random places		
	(ii) Describe, giving two examples, the purpose of an exploded view.	2	
	° To show how the parts fit together and how they assemble together - for example how the handle fits into the connector. ° To show the order that the parts will fit into each other - the handle into the connector, and then a fixing screw to hold it in place. They are pulled out chronologically for this.		

4. (continued)

An orthographic drawing of the handle component is shown below.



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4. (continued)

- (b) Describe the 3D CAD modelling techniques used to model the handle component, shown opposite.

You must refer to the dimensions given in the drawing.

You may use sketches to support your answer.

5

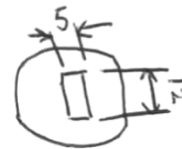
Sketch profile
shown.



create sketching
plane perpendicular.
attach and sketch
profile 2 to profile
1 as shown - they
must touch.

extrude along a
path, using profile
1 as the profile to
extrude and profile
2 as the path.

Sketch on one of the profile
1 faces - either. sketch
profile shown. make it
central to the profile.
Extrude by 8.



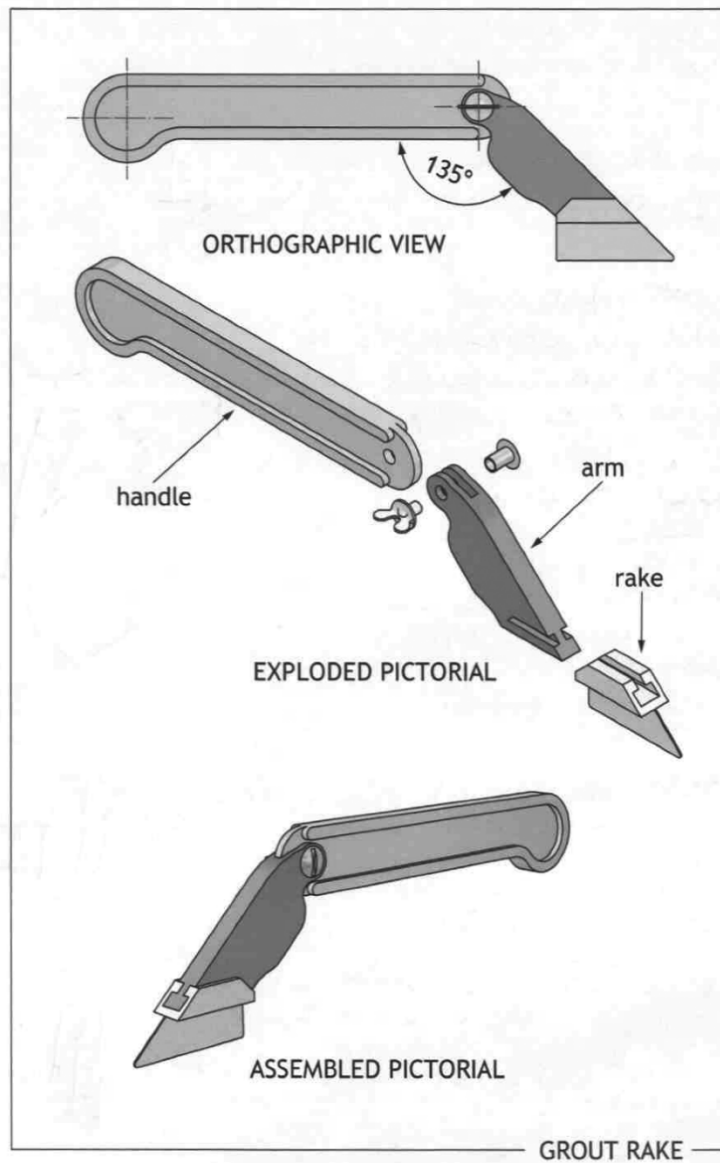
Sketch on the side of the
rectangle you extruded,
sketch profile shown.
subtract fully through
rectangle.



Mirror this rectangle so it
copies onto the other side
of the handle.

4. (continued)

Graphics for a grout rake are shown below.



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4. (continued)

MARKS

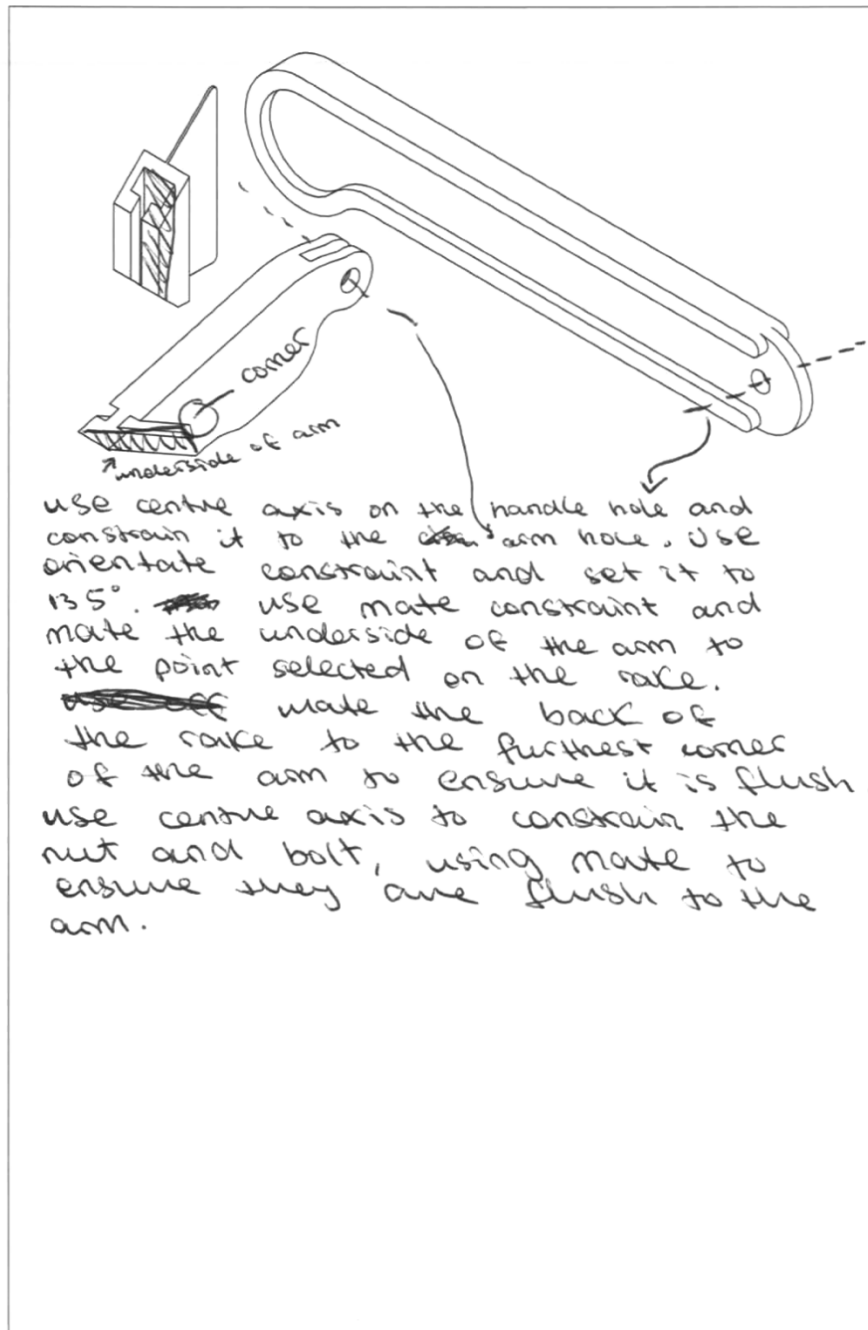
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- (c) Describe, using 3D CAD terms, how to constrain the three grout rake components, shown below.

You must constrain the arm and rake at a 135° angle to each other, as shown opposite.

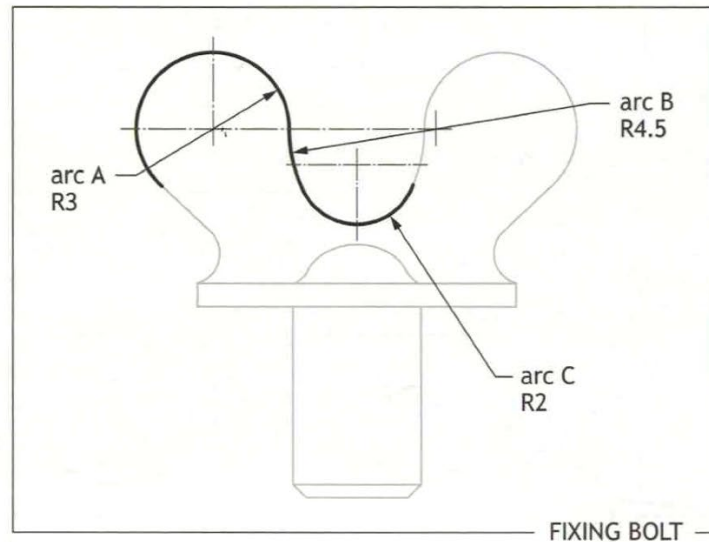
You may annotate the drawings and use sketches to support your answer.

4



4. (continued)

The fixing bolt component was modelled using tangency.



(d) Using the principles of tangency:

- (i) calculate the distance from the centre of arc A to the centre of arc B

1

$$3 + 4.5 = 7.5$$

- (ii) calculate the distance from the centre of arc B to the centre of arc C.

1

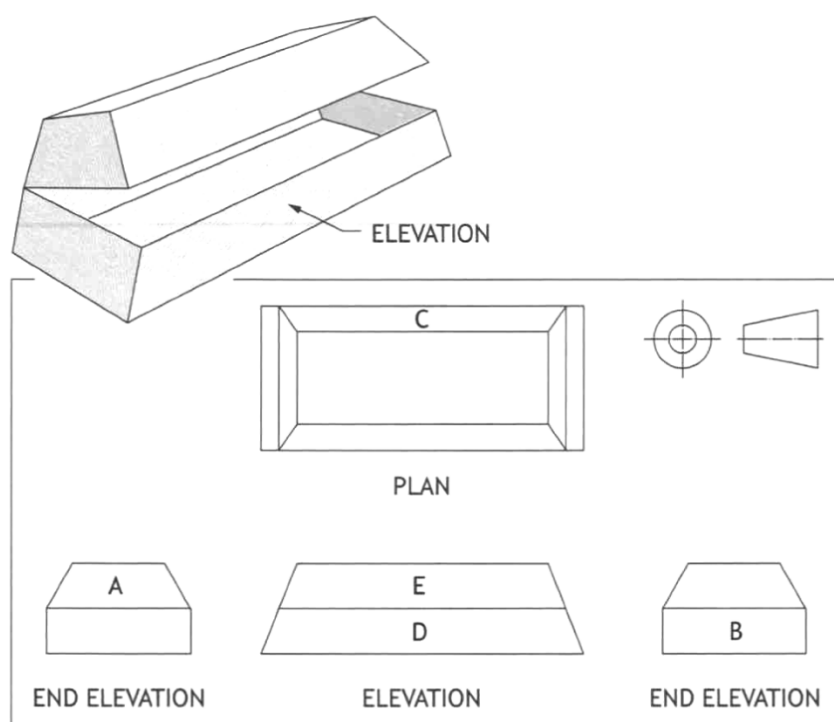
$$4.5 - 2 = 2.5$$

4. (continued)

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Graphics for proposed packaging for the grout rake are shown below.

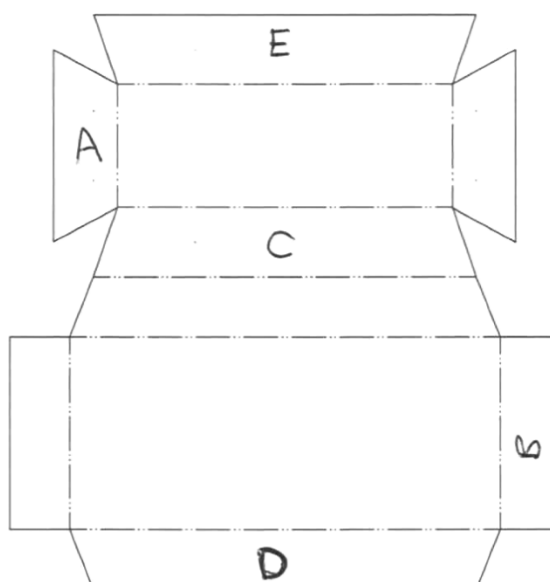


- (e) Identify the position of faces A–E on the surface development below.

The surface development is shown from the outside.

(An additional graphic, if required, can be found on page 37.)

5



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4. (continued)

Illustrations of the grout rake are shown below.

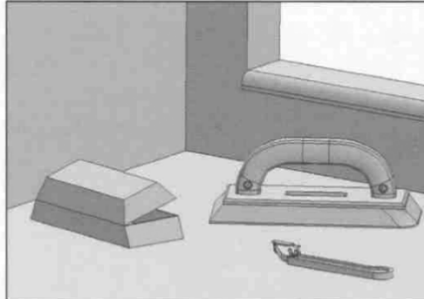


Illustration 1



Illustration 2

- (f) Describe **two** 3D rendering techniques applied to produce the graphic shown in Illustration 2.

2

- materials on components/environment creating texture.
- lighting creating realism and shows textures/materials of the items.

- (g) Describe, giving **two** examples, how the use of a sited environment can improve an illustration.

2

- They show the scale of the grout rake relative to an environment - we can see the size compared to a window.
- it shows what it would look like in real life - we can see what the grout rake would look like in a bathroom being used.

5. A flyer for a soap company is shown below.

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(i) →

© SaranteSoaps 2025 ← (ii)

**SCOTLAND'S NUMBER 1
SOAP & CLEANING SUPPLIER**

SARANTE SOAPS

OUR PRODUCTS

(iii) → **W**hether you shop online or shop in store, you'll find a fantastic range of products to suit your cleaning needs. All of our products are manufactured using sustainable material.

- Organic soaps
- Bath bombs
- Citrus cleaners
- Stain removers
- Industrial bleaches
- Artisan soaps
- Odour removers
- Un-perfumed soaps
- Vegan products

OUR SERVICES

We offer a varied range of services for homes and business. Using our online booking system you can specify which services you require, and the frequency of visits. Our team of expert cleaners can keep your home or work environment looking its best all year round. For more information, visit our website, or contact our offices directly using the details below.

(iv)

Text 1

Text 2

MAIN PERTH DEPOT

ADDRESS

Warehouse 72
North Cairn Street
Perth, Scotland

T: 02983 22288891
E: sa.soaps@eng.uk
W: www.sasoaps.co.uk

Flyer distribution date: May 2025

(v) →

UPDINGSTON. PERTH. AVIEMORE

HAMILTON. INVERNESS. HIRKCALDY

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5. (continued)			
(a) State the name of the desktop publishing symbols and techniques labelled on the flyer shown opposite.			
(i)	registration mark	1	
(ii)	header	1	
(iii)	drop capital	1	
(iv)	column rule	1	
(v)	registration crop marks	1	
(b) State the two different types of text justification labelled on the flyer shown opposite.		2	
Text 1	full justification		
Text 2	centre justification		
(c) Describe the benefit of using the desktop publishing technique bleed in the flyer.		1	
it means there is no white margin in the final copy. extra colour will be trimmed off, meaning the design goes right to the corner of the page. in this case the ^{green} image will go right to the end of the page.			

5. (continued)

The layout was produced using layers in DTP software.



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- (d) Describe **two** advantages to the graphic designer of using layers to produce the layout.

2

- layers can be turned on/off so the designer can edit items and see them more clearly without clutter
- layers can be edited separately so it is easier to edit individual elements without accidentally clicking on the wrong thing

The images used on the flyer were photographed by the company's graphic designer.

- (e) Describe **two** benefits to the soap company of using images created by staff, rather than using stock images.

2

- Stock images cost money, so they are saving expenses by taking their own.
- their own images will be custom to them - they will be more relevant and unique.

5. (continued)

A digital version of the flyer was produced, shown below.



- (f) Explain **two** benefits to consumers of accessing desktop published media digitally.

2

- it is easy to manipulate/use - they can access all information with few steps, so people who don't use tech often
- They can zoom in/out in the places they want to see bigger/smaller, meaning they can access larger text or images if they want to see it clearly.

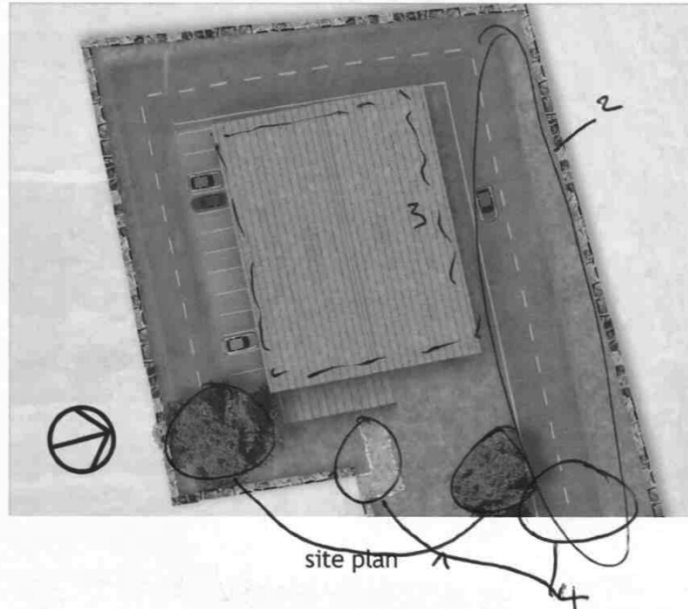
★ find it ^{with} ease.

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5. (continued)

A CAD technician produced a site plan of the soap company's main depot.



- (g) Describe, giving four examples, the information that the site plan communicates about the depot.

4

- placement of ^{existing} trees they may need to avoid or work around.
- placement of the building in relevance with roads they need to avoid/work around
- scale/size of the depot in relevance to the site
- entrance/exit points for cars and pedestrians and for builders.

★ existing
★ building

5. (continued)

A floor plan of the main depot was also produced. The graphic featured a range of British Standard symbols. Two are shown below.



symbol A



symbol B

(h) State the name of symbols A and B.

2

(i) Symbol A radiator symbol

Symbol B WC symbol

(ii) Describe, giving **two** examples, how a CAD library would be useful for the CAD technician when producing the floor plan.

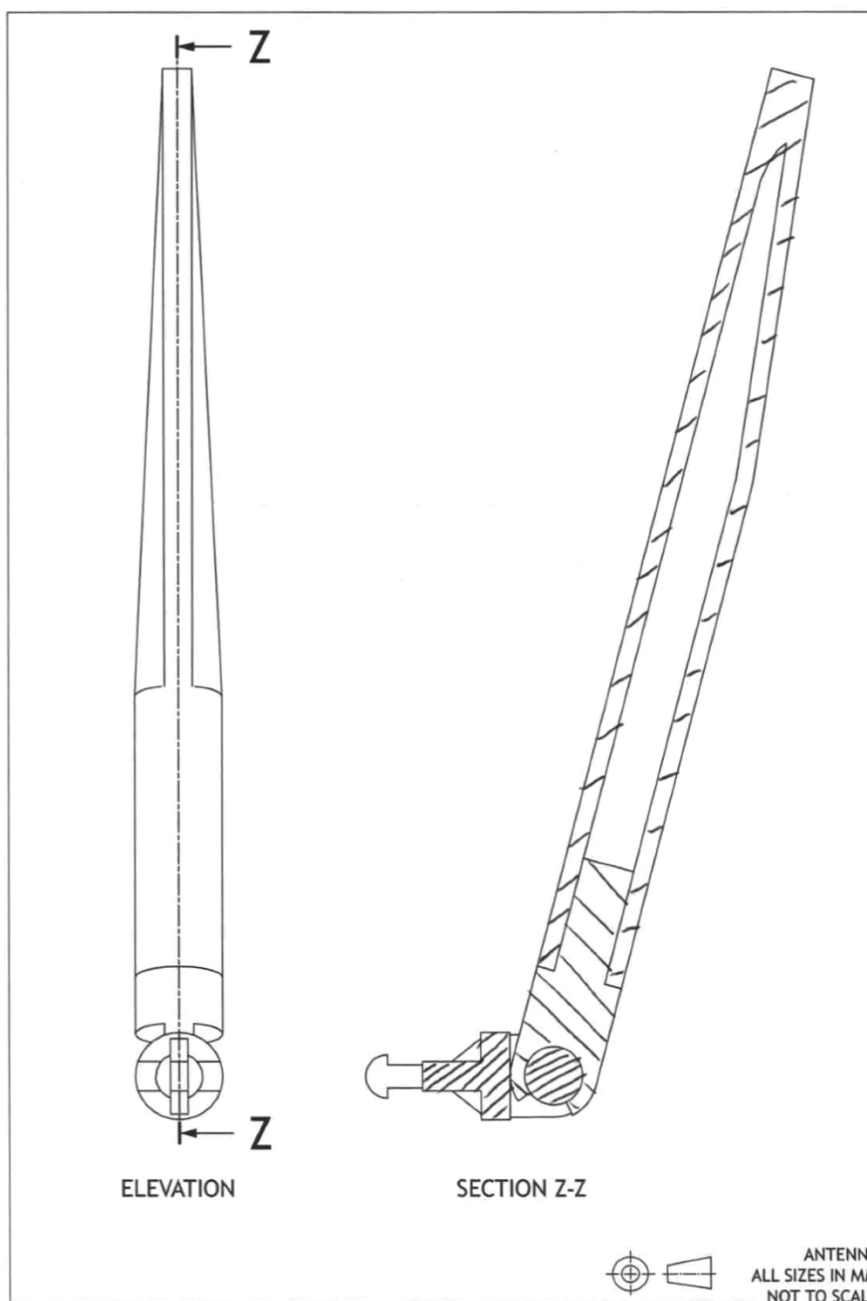
2

° Saves time as they don't have to create symbols/models themselves
 ° they can easily search swiftly for what they need in the library, making it quick & efficient - they don't need to waste time trying to find something in their own library/computer.

ADDITIONAL SPACE FOR ANSWERS

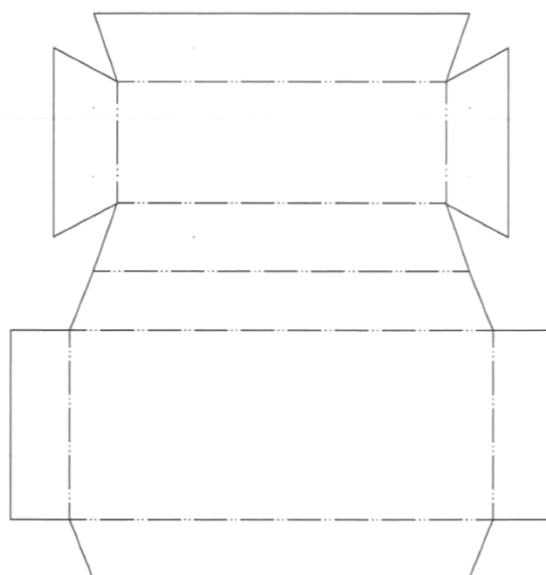
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Additional graphics for question 3 (a)



ADDITIONAL SPACE FOR ANSWERS

Additional graphic for question 4(e)



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