

MARKS

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- Zeus Electronics are promoting their new communicator, the L-COM. Their promotions team have drawn up two promotional layouts for consideration, shown below.

L-COM Promotional layout 1



L-COM Promotional layout 2



Layout 1 was produced first. DTP edits were then made to some of the items to create layout 2.

- State the names of the DTP edits used to change the following items between layout 1 and layout 2.

4

The L-COM product name

DTP edit _____

The slogan ('A NEW DAWN ...' etc.)

DTP edit _____

The body text

DTP edit _____

The image of the L-COM product

DTP edit _____

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(continued)

It is important to create unity in a layout in order to hold the layout together and improve visual impact.

- (b) Describe two ways in which the graphic designer has created unity in layout 2. 2

In both layouts the product image of the L-COM communicator is the dominant item in the layout.

- (c) Explain two things the graphic designer has done to make the product image the dominant item. 2

The graphic designer felt it was important to include eye-catching contrast in the layouts. One way he achieved this was through the use of colour.

- (d) State two **other** ways in which the graphic designer has created contrast in the layouts. 2

The yellow and orange flash-bar behind the layout has been changed in layout 2 to create a style of balance that offers more visual impact. 1

- (e) State the style of balance achieved by the change. 1

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1. (continued)

The red line in layout 2 is carefully chosen and positioned to enhance the layout.

- (f) Describe one way in which the red line benefits layout 2 (do not repeat a previous answer).

1

The web address and the 'World Electronics' text are placed in the spaces at the top and bottom of the layouts.

- (g) State the names given to these spaces in a layout.

2

Space at the top _____

Space at the bottom _____

- (h) State the name of the DTP feature applied to the web address in layout 1.

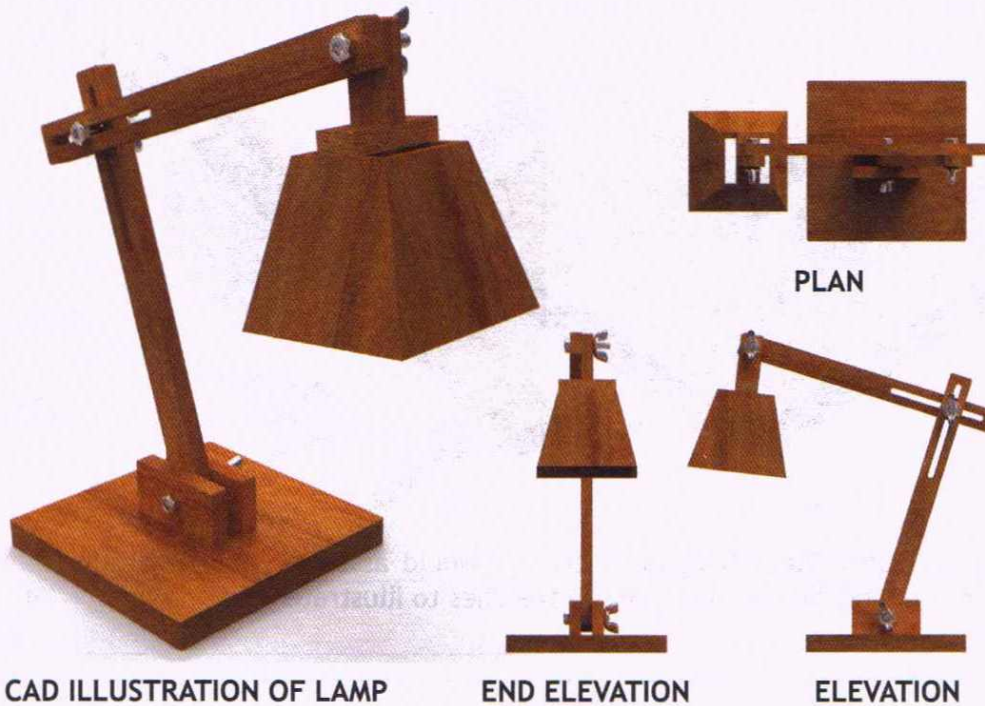
1

Total marks 15

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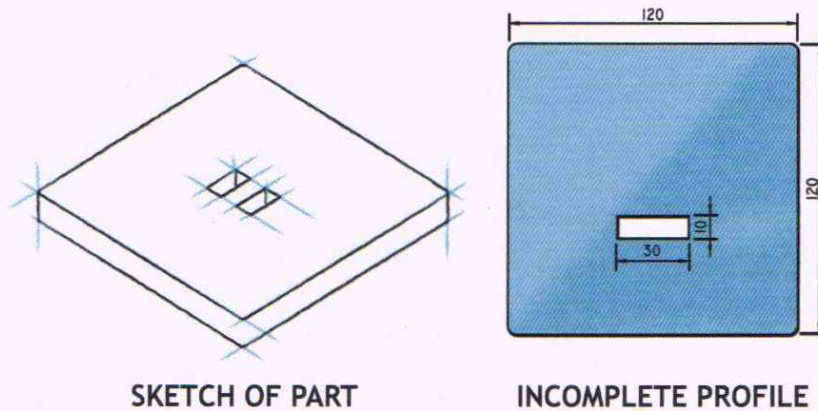
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2. A furniture company wants to expand its range of desk lights and has employed a design engineer to create a new flat-pack version. The design engineer used 3D CAD to illustrate her proposal.



The design engineer used the extrude command to make the base of the lamp. The base of the lamp requires two rectangular holes, identical in size and accurately centred on the base, to allow the vertical components to fit in.

An incomplete profile with one rectangle correctly in place is shown below.



- (a) Describe how the second hole can be drawn on the incomplete profile using only the information shown here. You may sketch directly onto the incomplete profile to help explain your answer.

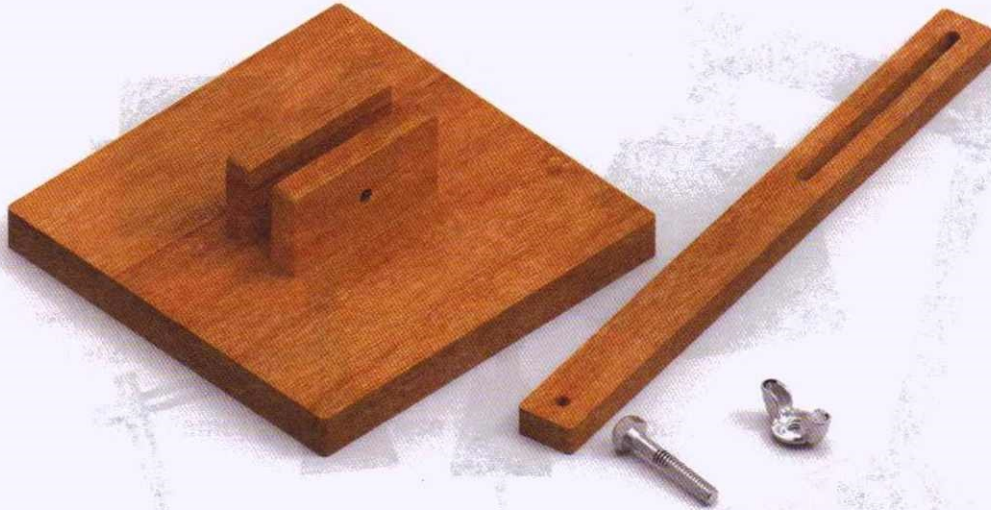
2

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2. (continued)

A range of CAD components are illustrated below.



- (b) Describe, using 3D CAD terms, how you would assemble and constrain the components above. You may use sketches to illustrate your answer. 4

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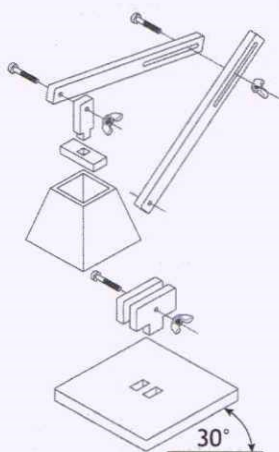
2. (continued)

The bolt and the wing-nut were loaded from a 3D CAD library of standard components.



(c) Describe two benefits of a CAD library of standard components.

2



VIEW X

(d) Identify the type of pictorial view shown at view X.

1

(e) Explain how view X can be used to support a customer.

1

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2. (continued)

Two illustrated versions of the lamp are shown below.



The design engineer illustrated the 3D CAD model by applying different materials. This tested the appearance of the lamp in different materials and colours.

- (f) Describe two other ways the 3D CAD model can be used to test the design of the lamp. 2

Total marks 12

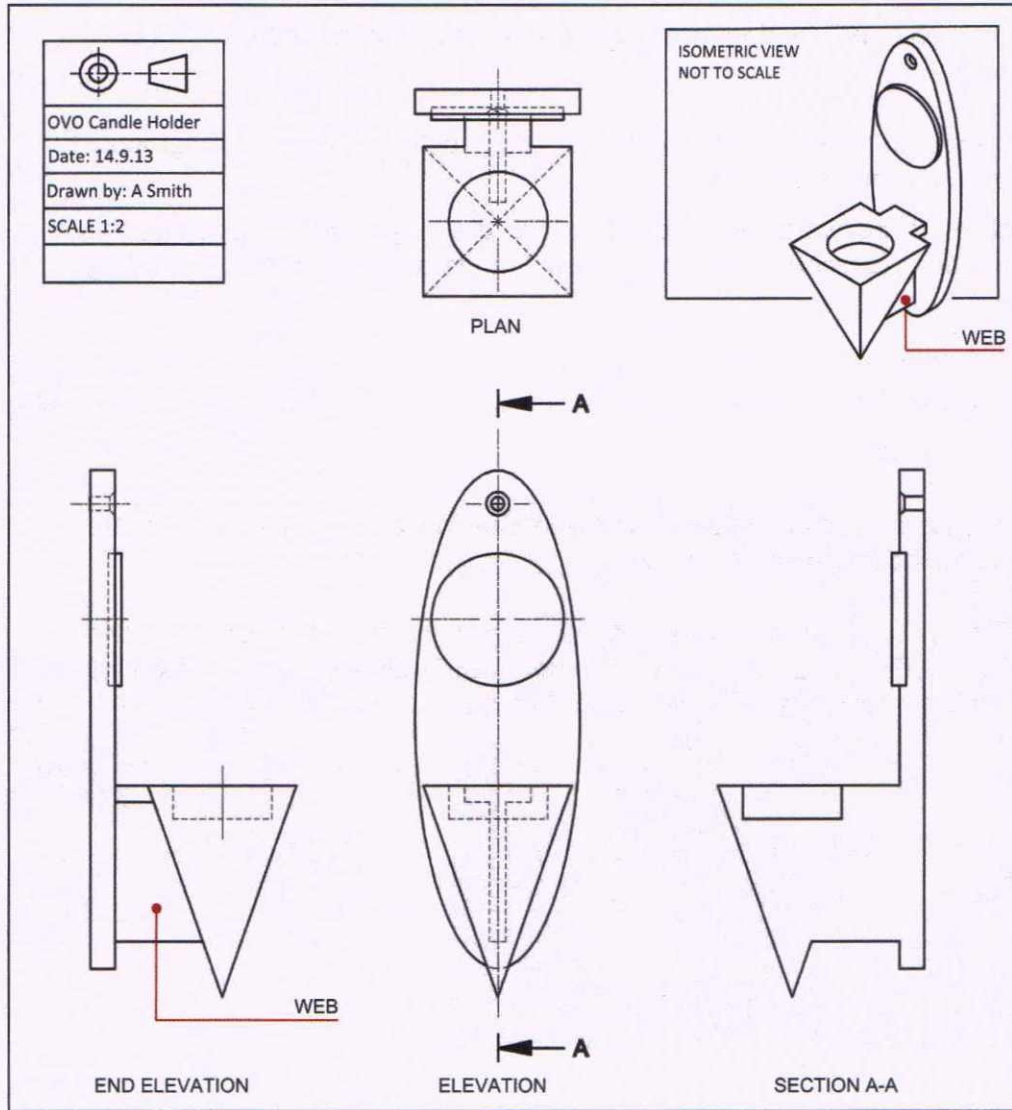
3. Images and orthographic production drawings of a new candle holder are shown opposite. It is being marketed as the OVO Candle Holder.

The OVO Candle Holder is a single component and has a second component, the mirror, added. It is not sold with the tea-light candle and the drawings below do not include a tea-light candle.



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3. (continued)



The view of section A-A is incomplete.

- (a) Complete the view of section A-A by applying British Standards conventions and adding relevant features. You should sketch or draw the missing features directly onto the incomplete section A-A or you may annotate section A-A to describe your answer.

7

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3. (continued)

The orthographic production drawings are to be dimensioned to support manufacture.

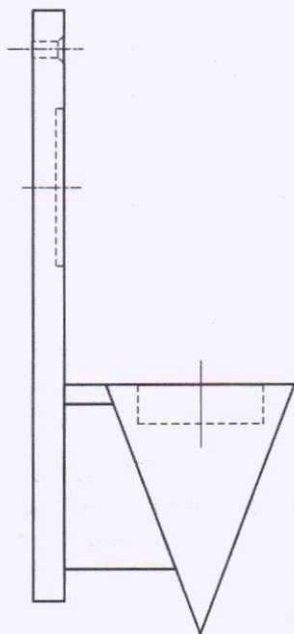
- (b) Add three dimensions, of the types listed below, to the orthographic views on the previous page.

Measure three suitable sizes on the drawings before adding the dimensions, correctly applying British Standards conventions, including scale.

- One length 2
- One breadth 2
- One diameter 2

The end elevation shown below is to have the mirror and tea-light candle added in an orthographic exploded view.

- (d) Indicate suitable positions for the mirror and the tea-light candle in the exploded end elevation below. You may sketch or draw your answer or annotate the drawing to explain your answer. 2



EXPLODED END ELEVATION

Total marks 15

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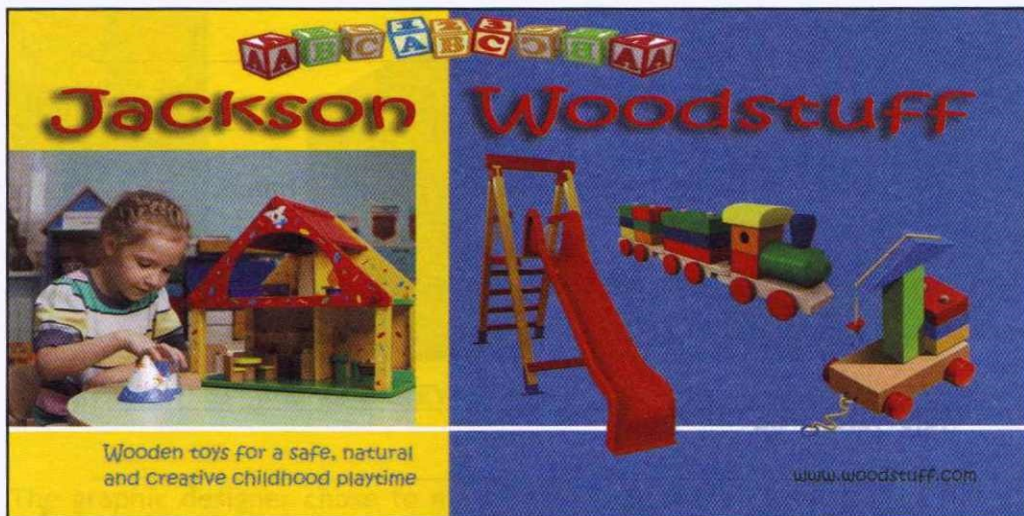
4. A company who specialise in scale model construction kits and wooden toys have produced two promotional adverts. The adverts will be used to promote the company to different target markets.

The first advert is aimed at a **target market** comprising:

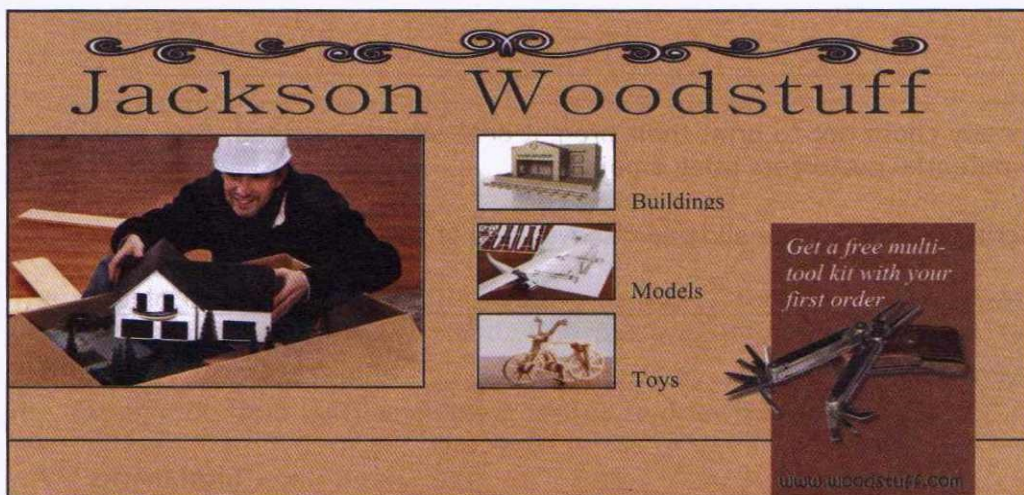
Gender Male and female
Age 8–12 years and their parents
Interests Toys and creative play
TV influences Cartoons and children’s programmes

The second advert focuses on a **target market** comprising:

Gender Male
Age 35–65 years
Interests Crafts and modelling
TV influences Home improvement shows



Advert 1



Advert 2

4. (continued)

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Advert 1 makes use of the colour red in the company name.

- (a) State whether red is an advancing or a receding colour. 1

- (b) Describe the effect this colour has on the title in the layout of advert 1. 1

- (c) Explain why the colours used in the layout of advert 2 were chosen. 1

The two adverts use very different font styles in the **company name**.

With reference to the font styles:

- (d) Explain why the different fonts are considered suitable for each advert. 1

Advert 1: Font Style Kristen ITC

Advert 2: Font style Batang

The company chose not to print their promotional adverts. Instead, they sent them to potential customers using email.

- (e) Describe one advantage and one disadvantage of this marketing approach. 1

Advantage _____ 1

Disadvantage _____ 1

Total marks 7

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5. A new set of headphones have been released by SND1.

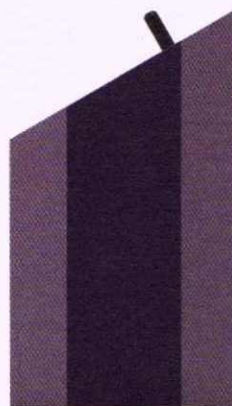
To promote their new headphones, SND1 have employed a graphic designer to create a new display stand. The display stand will be made from sheet metal. 3D CAD illustrations and orthographic views of the design are shown below.



PLAN



ELEVATION



END ELEVATION



ILLUSTRATED PICTORIAL VIEW

The graphic designer chose to make a 3D CAD model rather than a full-size card prototype of the display stand.

- (a) Give two reasons why a 3D CAD model was more suitable than the card prototype. 2

The graphic designer gave the illustration to a CAD engineer, including key information about the display stand. One piece of information stated: **A/C 400mm**.

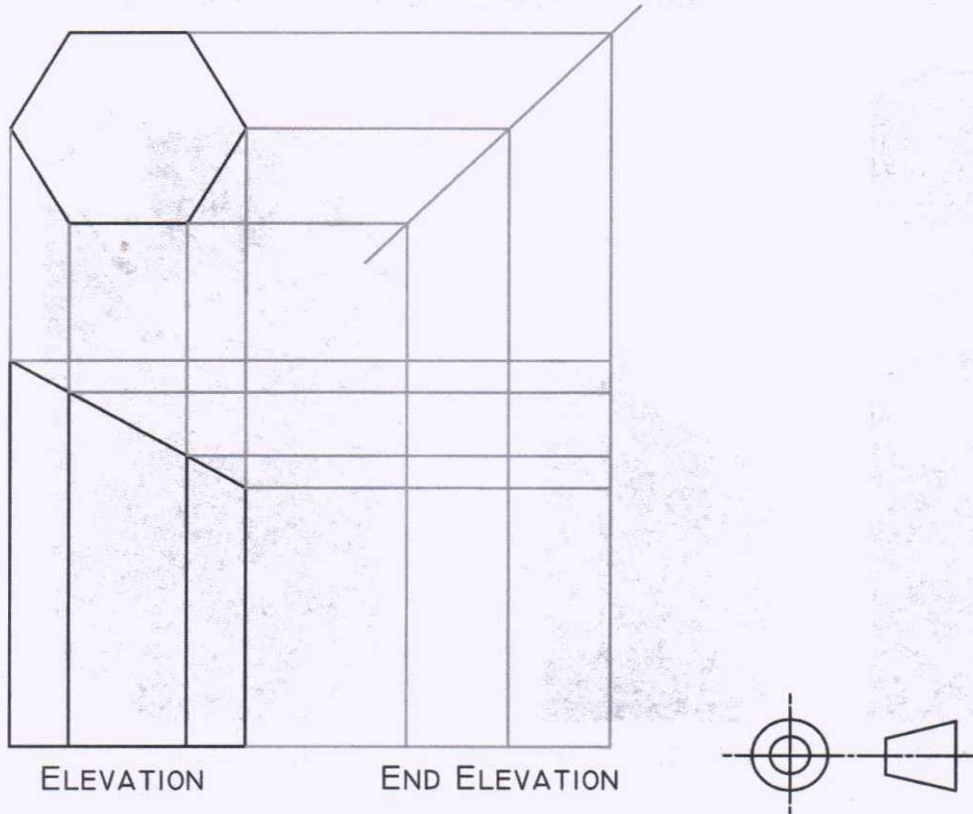
- (b) Explain the term 'A/C' and how it is used to draw this product. 2

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5. (continued)

The graphic designer initially only made the illustrated pictorial view of the stand. The CAD engineer created the orthographic views shown below.



- (c) Give two reasons why the CAD engineer would produce orthographic views of the display stand. 2

- (d) Complete the end elevation shown above by plotting the edges on the surface generators. You may sketch or draw lines or plot corner points. Do not include hidden detail. 4

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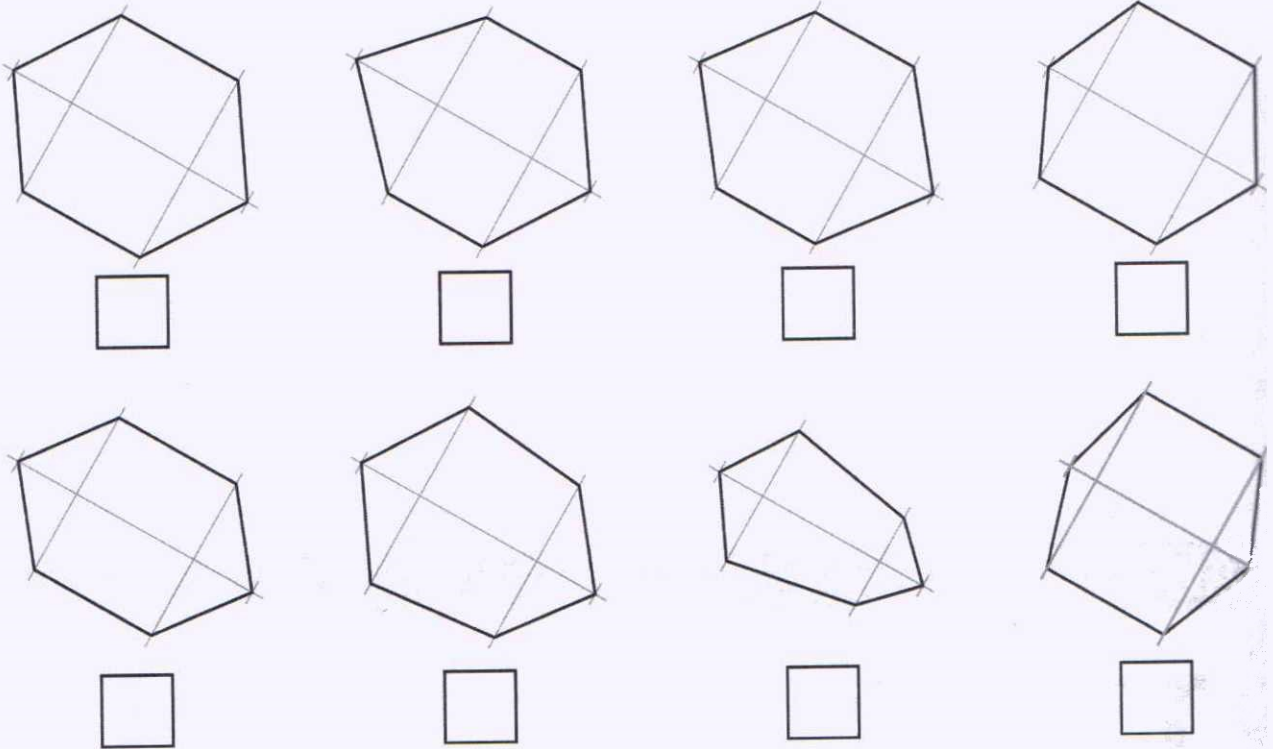
5. (continued)

The graphic designer used 2D CAD software to generate the true shape of the sloping face of the hexagonal prism.

(e) Identify the correct true shape by ticking a box below.

1

Total marks 11



[END OF MODEL QUESTION PAPER]