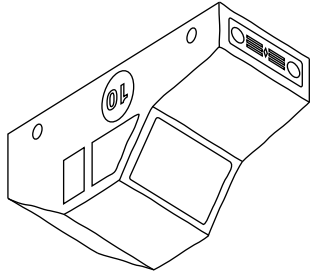


**Section A**

Answer **all** questions in this section.

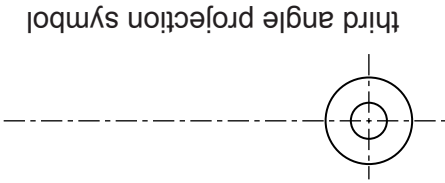
**A1** A sketch of a model of the body of a car is shown below.



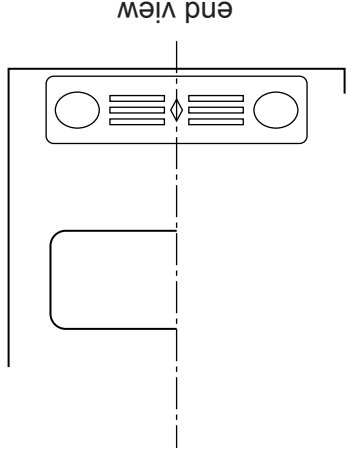
In the space below complete:

- (a)** the plan and end view of the car;
- (b)** the third angle projection symbol.

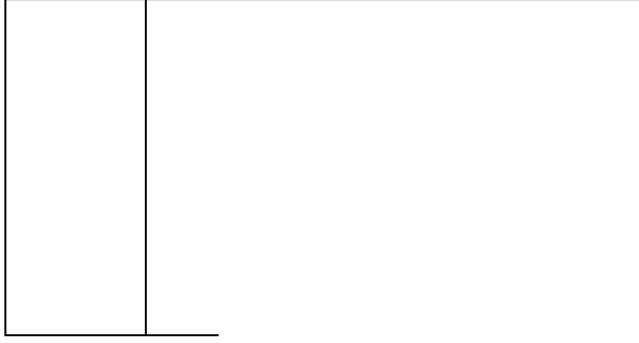
[8]  
[2]



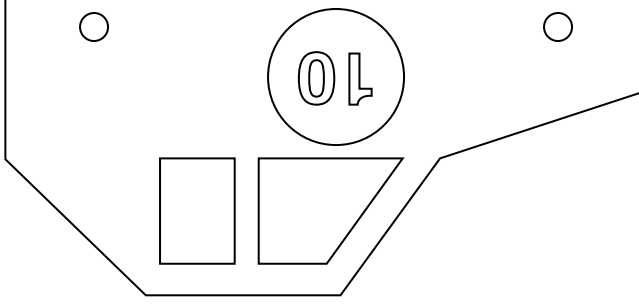
third angle projection symbol



end view



plan



side view

orthographic views of the body of the car

**0445/22**

Oct/Nov 2014 1 hour

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Centre Number .....

Candidate's Number .....

Candidate's Surname .....

Other Names .....

[Turn over]

car number	
windscreen	
lights and front grille	

Complete the table below to show the stickers by:

**(a)** adding the right half of the lights and front grille;

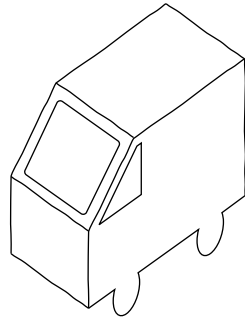
**(b)** rendering the windscreen to look like glass;

**(c)** adding the 0 to the car number.

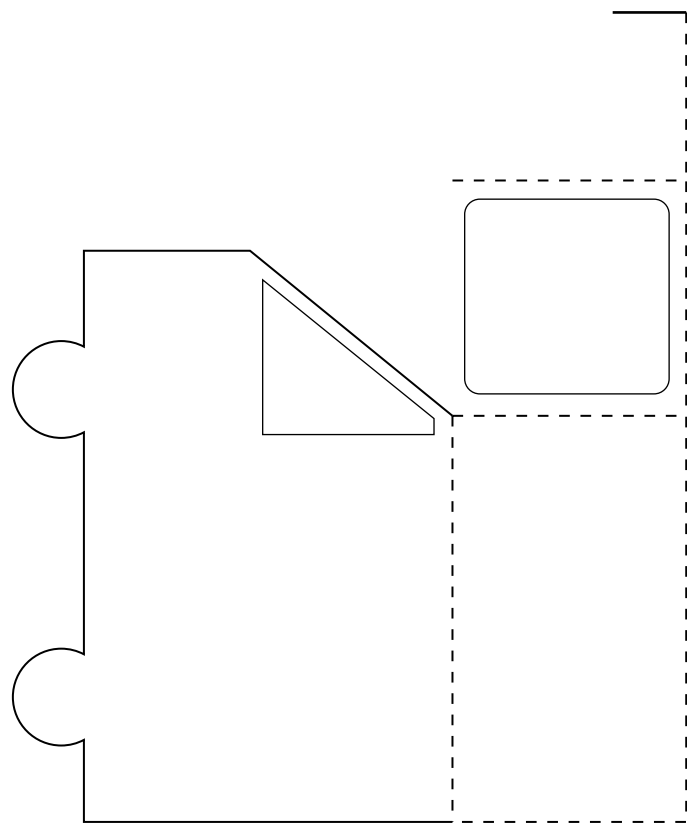
[2]  
[2]  
[2]

For  
Examiners'  
use

A3 (a) The model lorry shown below is to be made from thin sheet card.



Complete the drawing of the one-piece development (net) required to make the model of the lorry. Include all tabs and clearly show fold lines. Do **not** include the underside of the lorry. [5]



development (net) of the model lorry

(b) Complete the table below to show the tools and equipment required to cut out the development (net) of the model lorry from thin sheet card.

Tools required to cut out the development (net) from thin sheet card	
1. A safety rule	[1]
2. .... [1]	
3. A cutting mat	

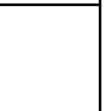
(c) Name a specific method of joining the tabs when assembling the model lorry and give **one** reason for your choice of joining method.

Method ..... [1]

Reason .....

.....

..... [1]

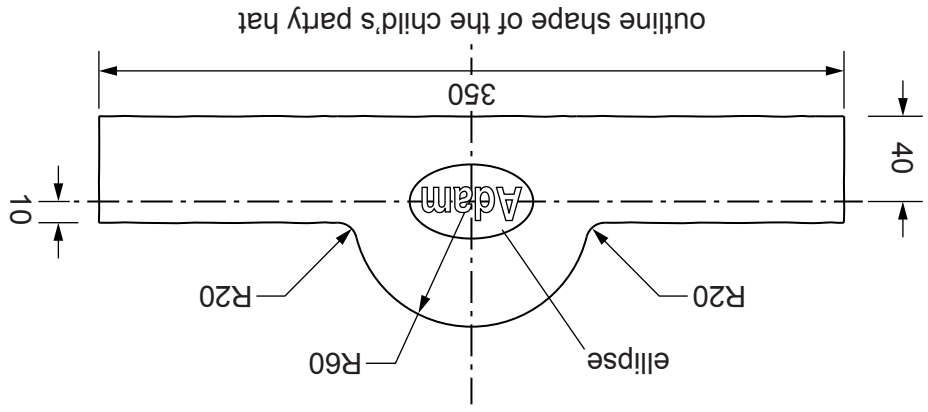


**Section B**  
Answer either question B4 or B5.

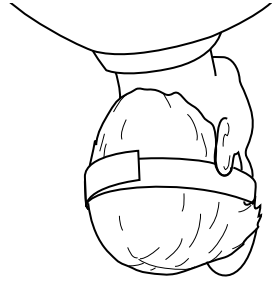
**B4 (a)** Sketches of a child's party hat are shown on the right.

On the centre lines below:

- (i) draw the outline shape of the hat; [12]
- (ii) construct the ellipse with major axis 100 and minor axis 60. [7]



hat on a child's head

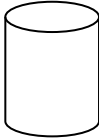


(b) The child's party hat is to be made from thin sheet card. In the space below use sketches and notes to show a method of joining the two ends of the hat together without the use of glue or any other materials. [3]

(c) The child's party hat needs to be strengthened so that it will not tear when in use. In the space below use sketches and notes to show a method of strengthening the thin sheet card. [3]

Adam

**B5 (a)** Complete the table below to show the name and shape of four sweets.

	Name	Shape	
1	cuboid		[2]
2	.....[1]		
3	triangular prism		[2]
4	hexagonal prism		[2]

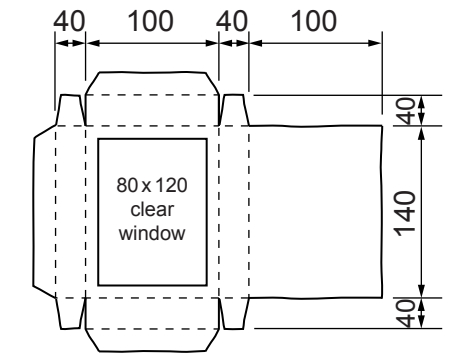
**(b)** The 2013 sales figures for the four sweets are shown below.

	Sweet 1	Sweet 2	Sweet 3	Sweet 4
Sales	35 000	60 000	45 000	70 000

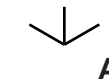
In the space below draw a bar chart to show the 2013 sales figures for the four sweets. Use colour/shading and labels to enhance the appearance of the bar chart. Show a scale. [5]

**(c)** The four sweets are sold in a box that contains 12 of each type of sweet. A sketch of the development (net) of the box is shown below.

From the start point **A** draw, to a scale of 1:2, an isometric view of the fully assembled box with the clear window uppermost. [10]



development (net) of the box



**(d)** Complete the table below to show the printing requirements for the development (net) for the box of sweets.

Number of boxes required	40 000
Colour or black and white	Full colour print
Printing method	.....[1]
Material	.....[1]
Material thickness	400g/m <sup>2</sup>
Material for clear window	.....[1]