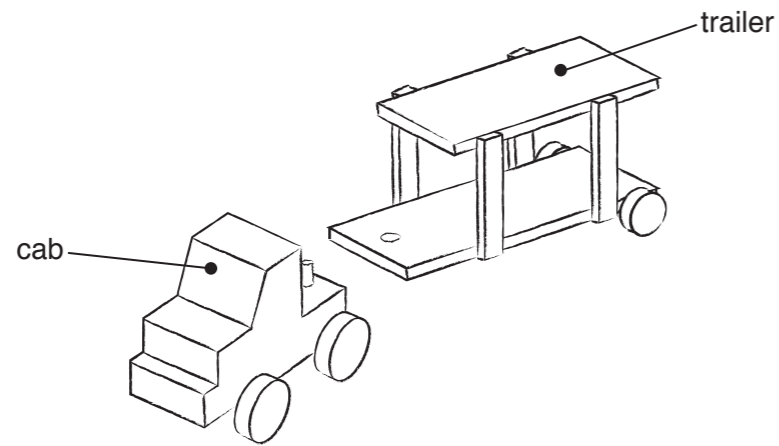


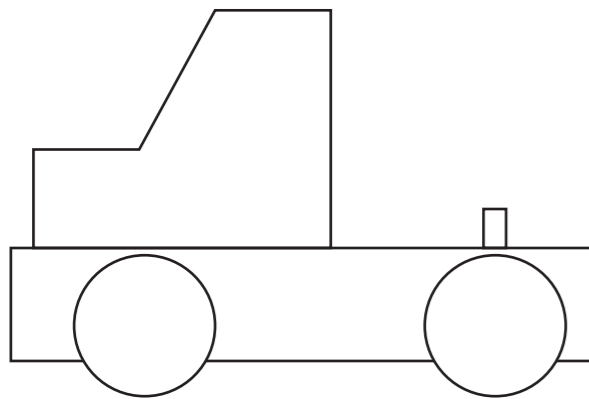
Section A

Answer **all** questions in this section.

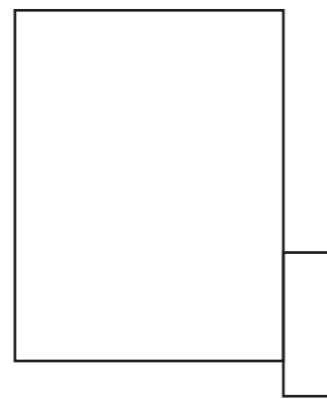
A1 A sketch of a model of a car transporter is shown below.



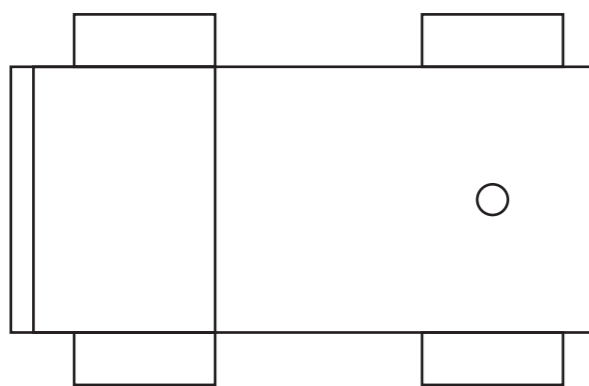
Complete the orthographic views of the cab of the car transporter shown below. [6]



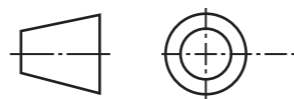
side view



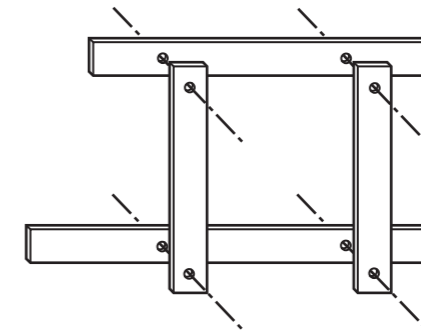
end view



plan

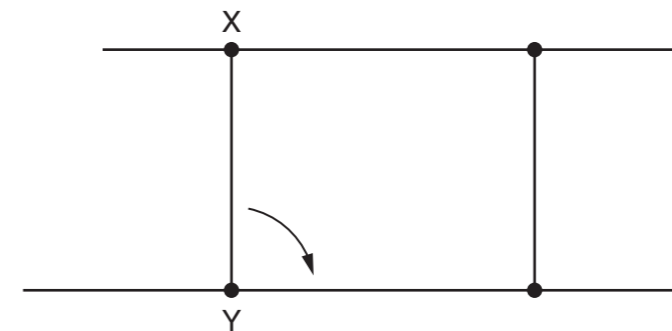


A2 The trailer is to be redesigned to include a mechanism that allows the top of the trailer to lower. A model of the mechanism is made from four strips of card shown below.



(a) Sketch and name a method of fastening the strips of card together. [2]

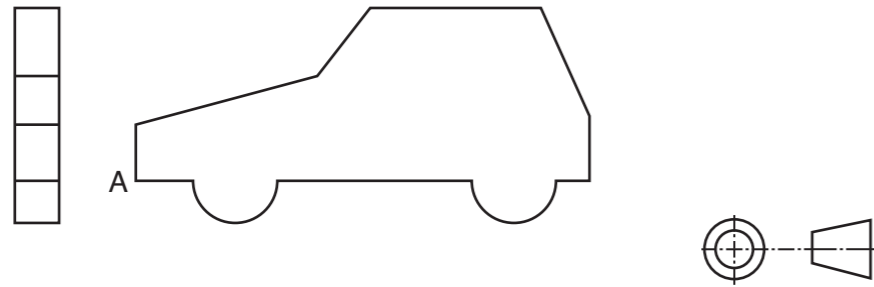
(b) Complete the schematic drawing below to show the path of point A as the line X – Y moves from a vertical to a horizontal position. [4]



| |
|--------------------------|
| For Examiner's use |
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| |

A3 Car shapes cut from foam board sheet are added to the trailer of the car transporter.

Orthographic views of one of the car shapes are shown below.



(a) Construct a 2 : 1 isometric drawing of the car shape from the given start point **A**.
Sizes should be taken from the orthographic views.

[7]

(b) State **two** reasons why foam board is a suitable material for the car shape.

1. [1]

2. [1]

(c) Describe how a computer could be used to search for and capture a car shape.

Search for

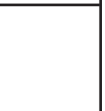
.....

..... [2]

Capture

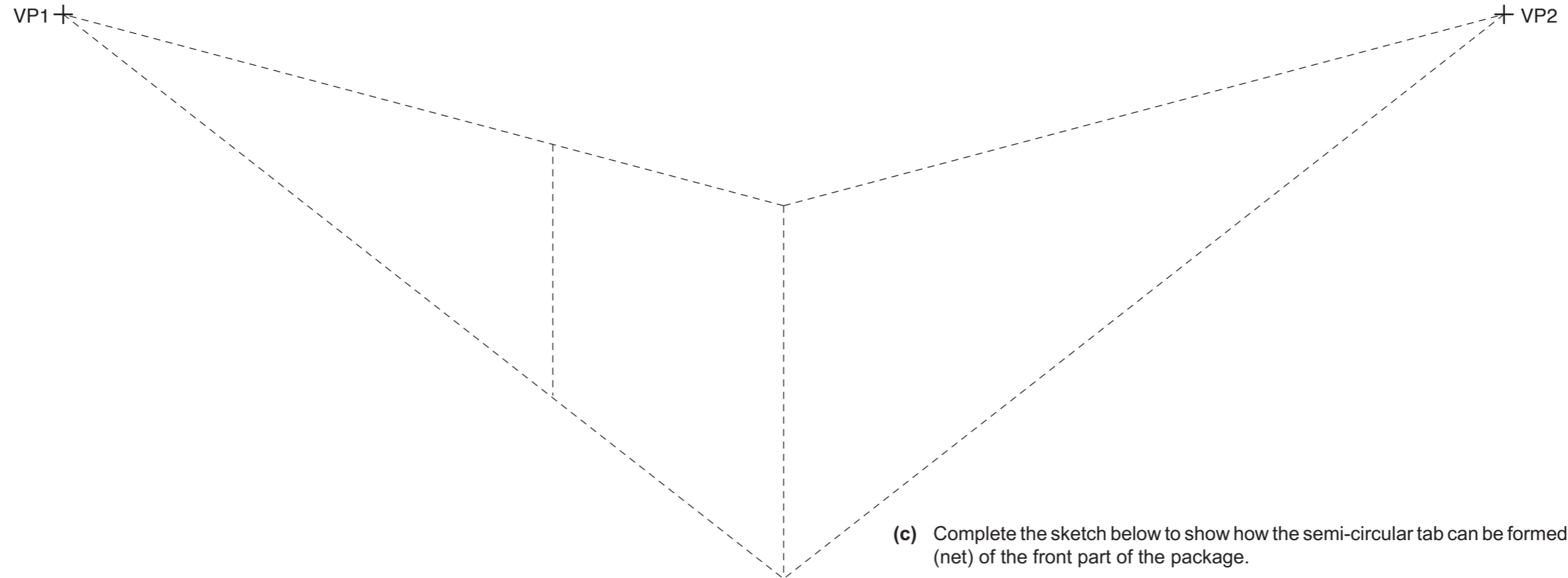
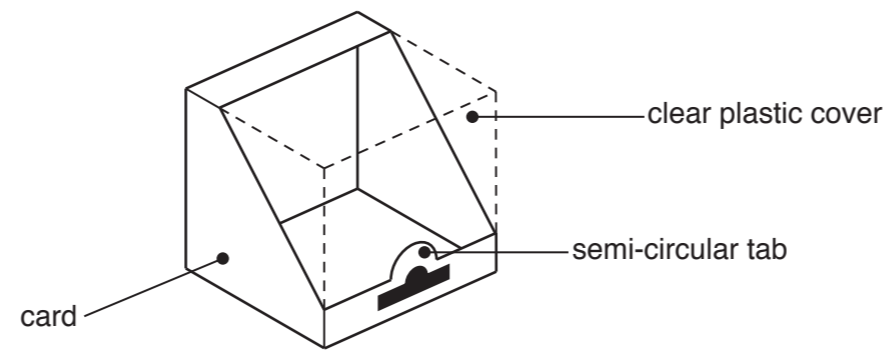
.....

..... [2]



B5 A package for a toy is shown on the right.

(a) On the start lines below complete the estimated two-point perspective drawing of the package for the toy. [15]



(b) Use sketches and notes to show a method of making the clear plastic cover. [6]

(c) Complete the sketch below to show how the semi-circular tab can be formed in the development (net) of the front part of the package. [4]

