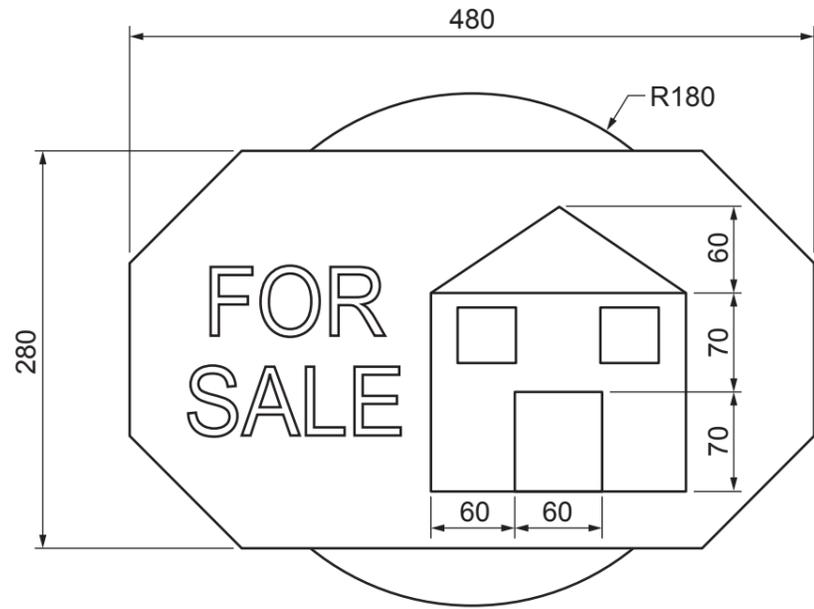


Section A

Answer **all** questions in this section.

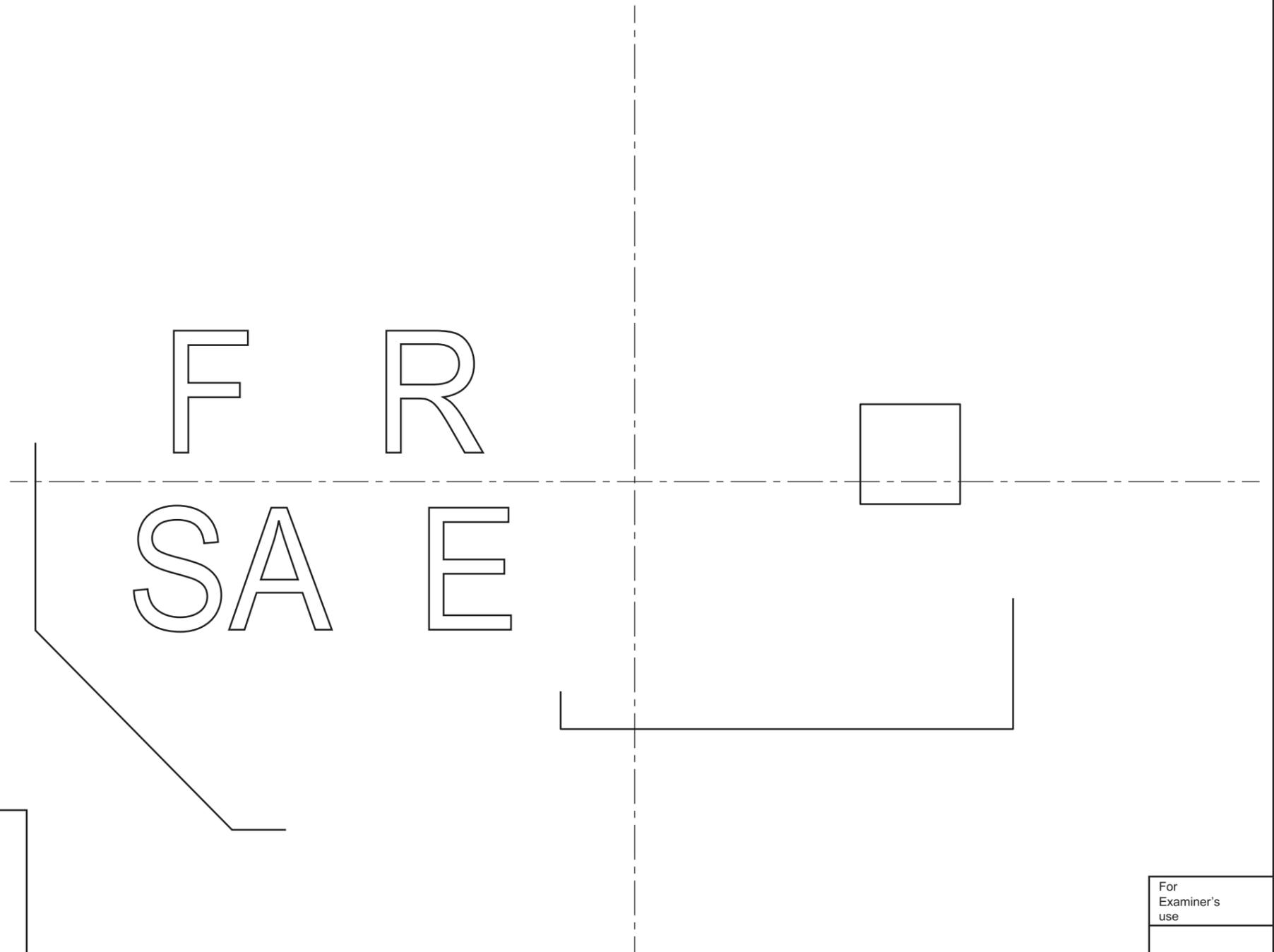
A1 A sign that states a house is for sale is shown below.



Complete the half-size view of the sign in the space provided to the right by drawing:

- (a) the outline of the sign
- (b) the house logo
- (c) the missing letters of FOR SALE.

[3]
[6]
[2]



A2 The sign is to be made from corrugated plastic.
Explain **one** property of corrugated plastic that makes it a suitable material for the sign.

.....
.....
..... [2]

For
Examiner's
use

0445/51 May/June 2021 **1 hour**
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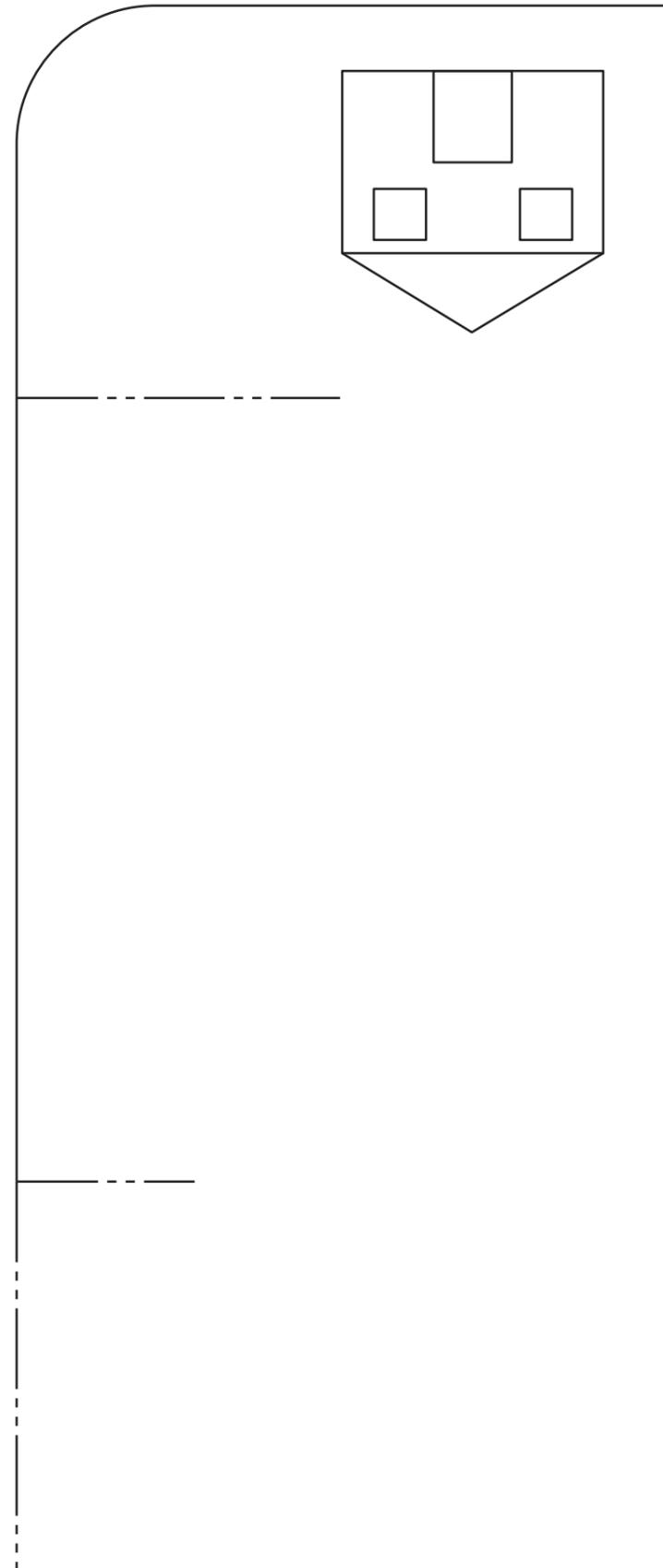
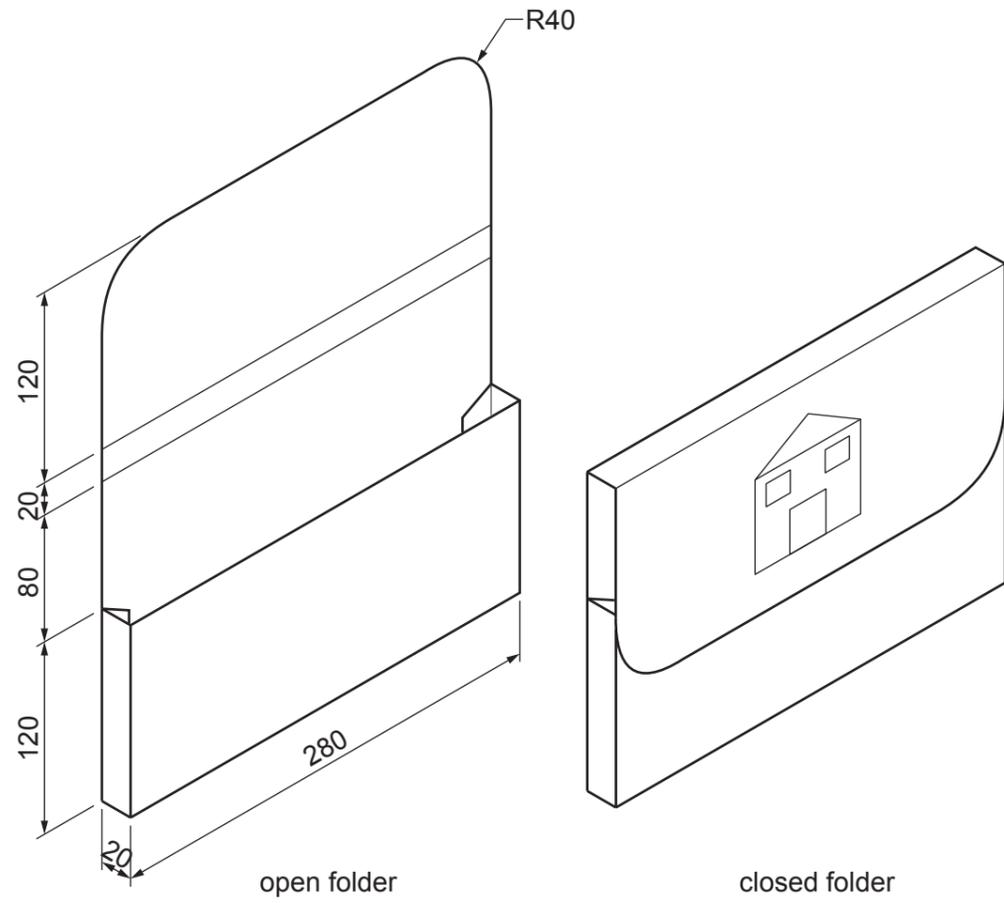
Centre Number

Candidate Number

Candidate Name

[Turn over

A3 A folder for holding information about the house that is for sale is shown below.



(a) Complete the half-size development (net) of the folder in the space to the right. [10]

(b) The development (net) is to be cut out from thin card using a craft knife.

State **two** safety precautions that should be taken when using a craft knife.

1

.....

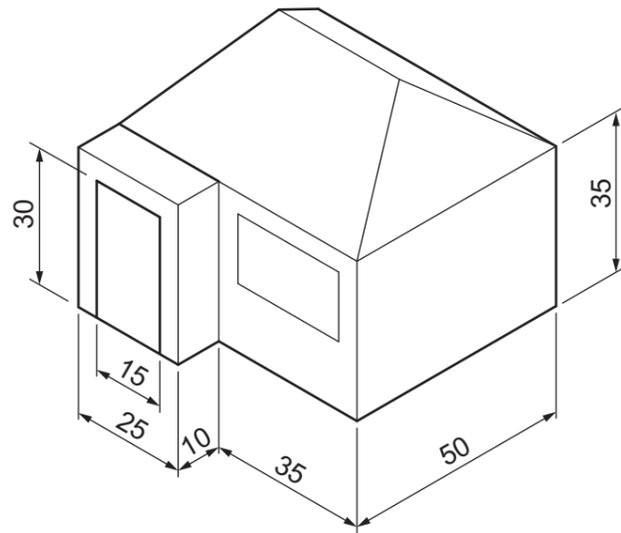
2

..... [2]

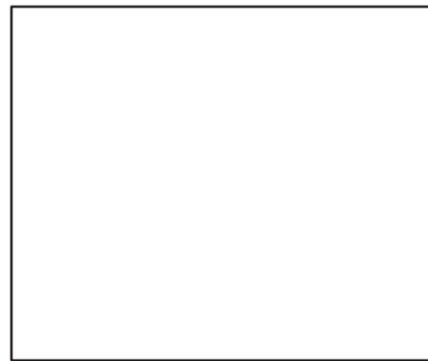
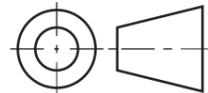
Section B

Answer **one** question, **either** Question **B4** or Question **B5** from this section.

B4 A model of a house is shown below.



(a) Complete the full-size orthographic views of the model house. [13]



plan



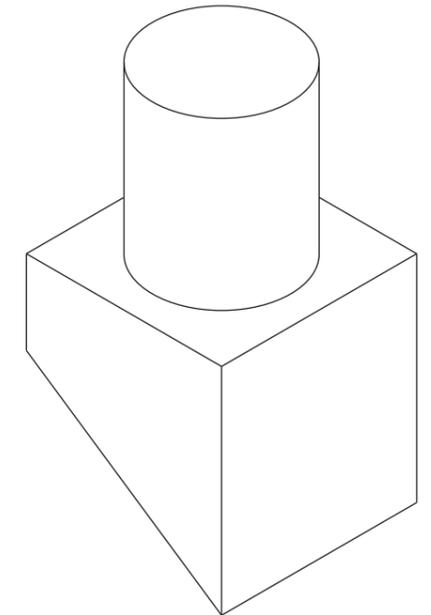
front view



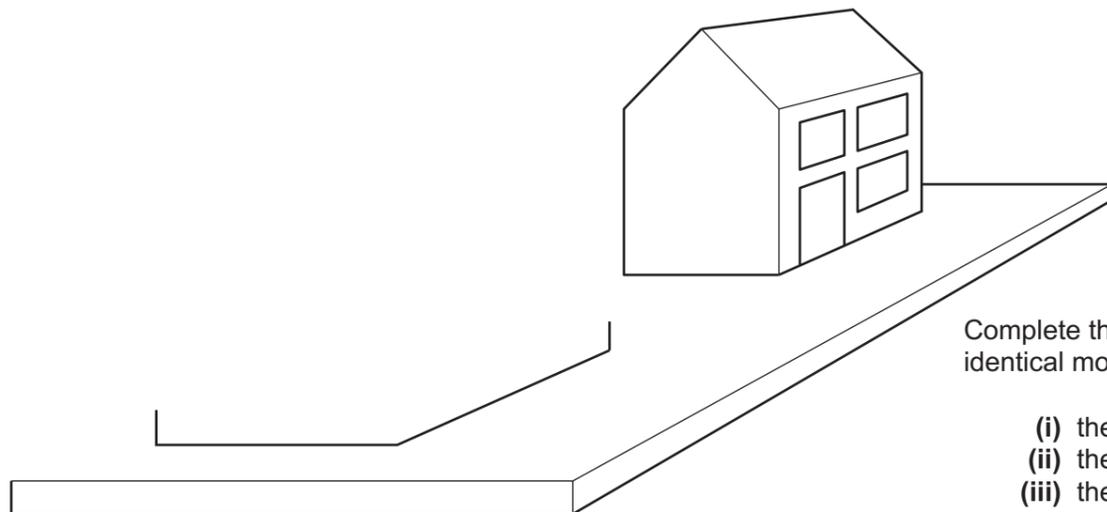
side view

(b) A chimney for the model house is shown below.

Add shading to the chimney to make it appear 3 dimensional (3D). [3]



(c) A different model house is shown below. This model house is mounted on a foamboard base. An identical model of this house is to be added to the foamboard base in the position shown.



Complete the estimated one-point perspective view of the identical model house and base by adding:

- (i) the walls and roof [3]
- (ii) the windows and doors [2]
- (iii) the back edge of the base. [1]



(d) Models of houses are made to a scale of 1:50.

(i) Tick (✓) the correct statement in the table below. [1]

Statement	✓
The model is 50 times bigger than the real house	<input type="checkbox"/>
The model is 50 times smaller than the real house	<input type="checkbox"/>
The model is 500 times smaller than the real house	<input type="checkbox"/>
The model is 150 times smaller than the real house	<input type="checkbox"/>

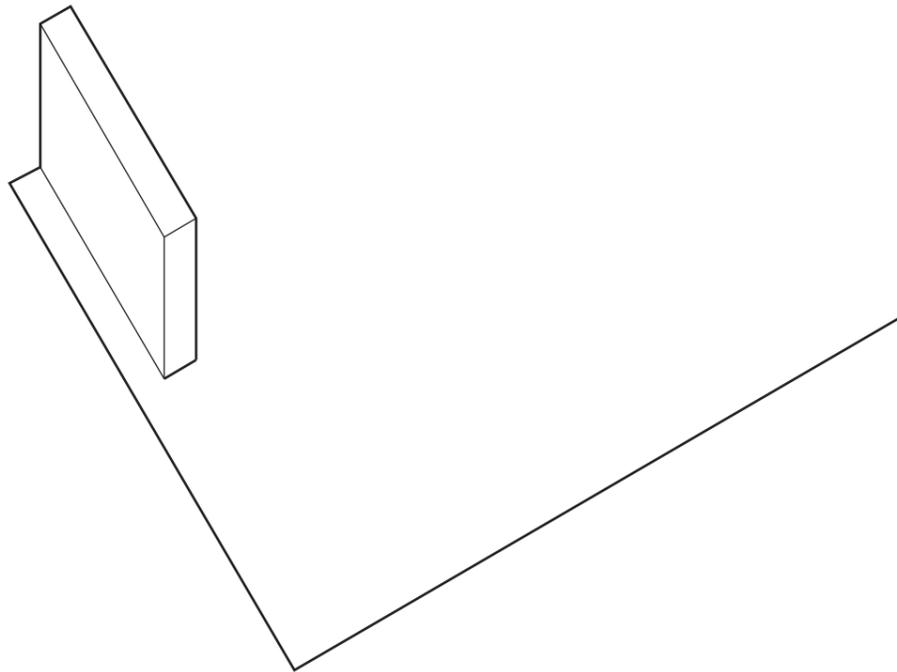
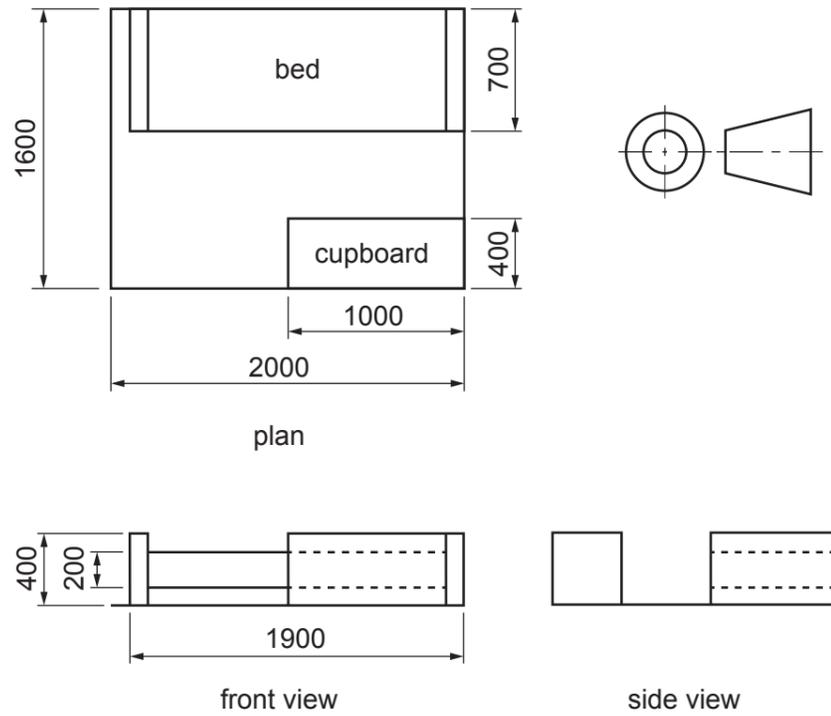
(ii) Explain **one** reason for making a model.

.....

 [2]

For Examiner's use

B5 Orthographic views of a room layout are shown below.



(a) Complete the 60/30° planometric view of the room to a scale of 1:20. [13]

(b) The plans for the room have been produced using CAD.

(i) Describe **one** advantage of using CAD to produce the plans compared to producing them by hand.

.....

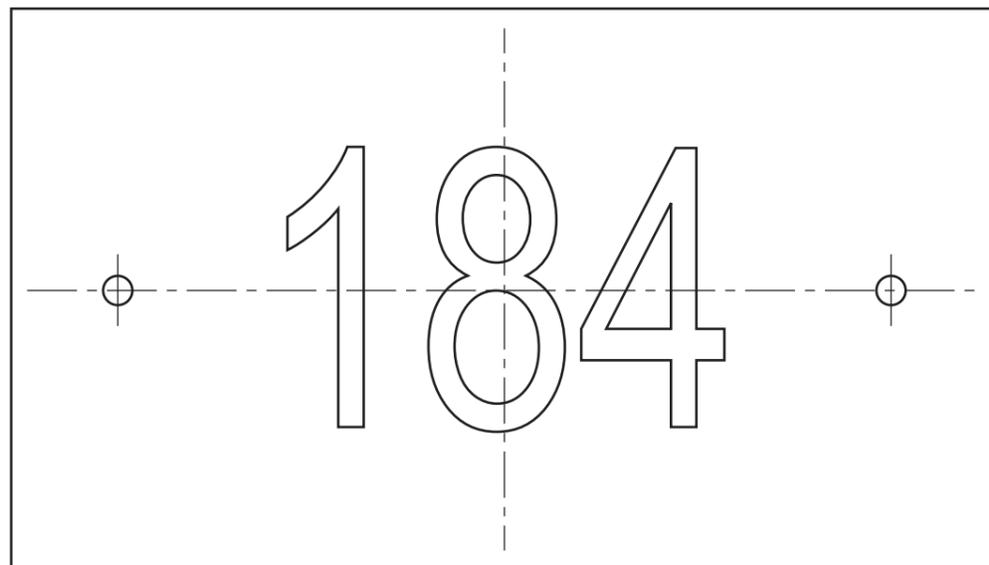
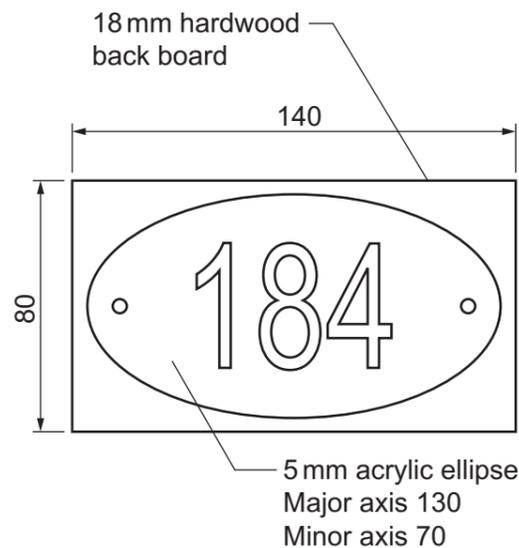
 [2]

(ii) State **one** suitable method of producing 10 copies of the plans.

..... [1]

(c) A sign to show a house number is drawn below.

(i) Complete the full-size drawing of the sign by constructing the ellipse. [6]



(ii) The 5 mm acrylic ellipse is fixed to the 18 mm hardwood back board using screws as shown below.

Complete the exploded isometric view to a scale of 1:2 by adding the hardwood back board. [3]

