

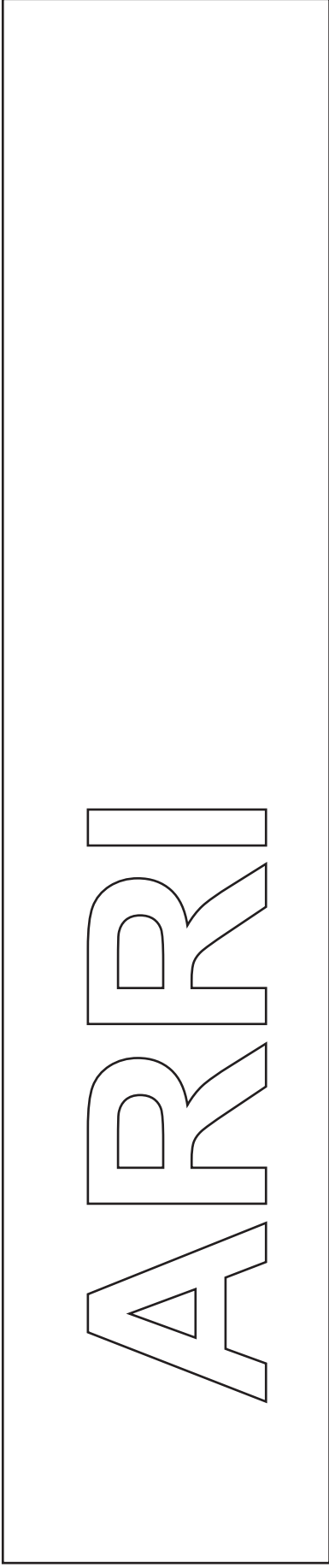
**Section A**

Answer **all** questions in this section.

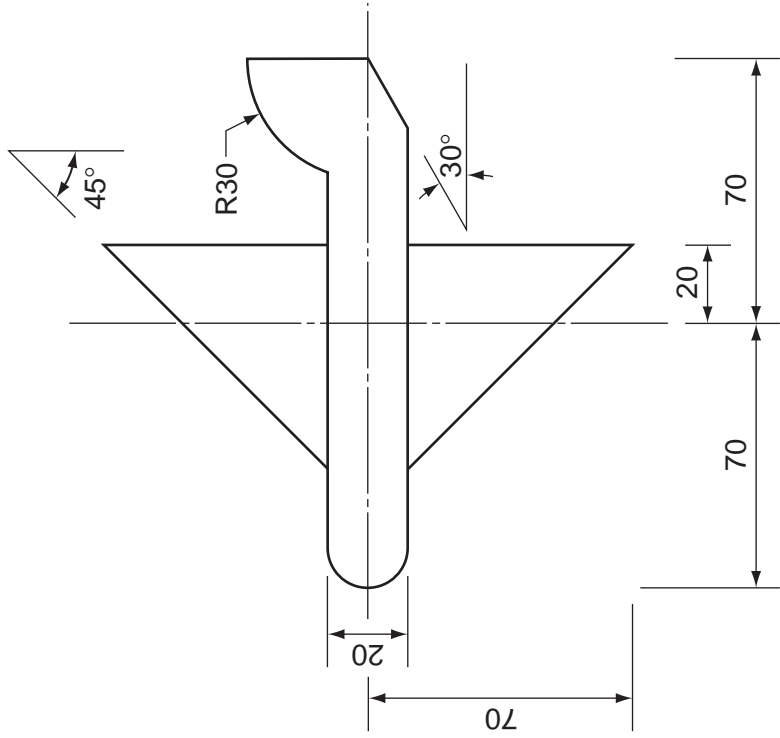
**A1** An incomplete direction sign for 'ARRIVALS' at an airport is drawn to the right.

Complete the direction sign by adding the **four** remaining letters.

All the letters must be the same height, spacing and style as those given. [6]

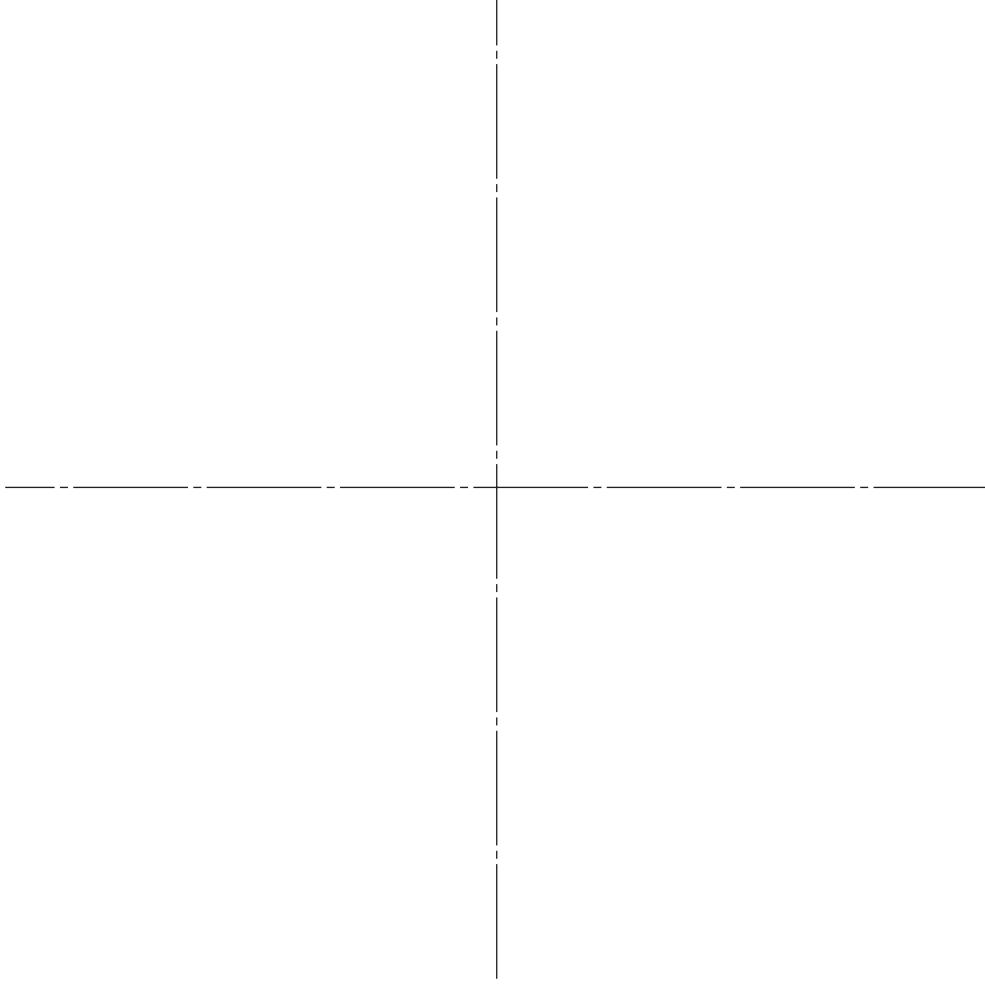


**A2** The sketch below shows details of an aircraft warning symbol for ground traffic at an airport. The symbol appears inside an octagonal sign.



**(a)** In the space to the right, draw the outline of the octagonal sign using the given side. [2]

**(b)** Inside the octagonal sign, draw full size, the aircraft warning symbol on the centre lines given. [7]



**0445/21** Oct/Nov 2010 **1 hour**

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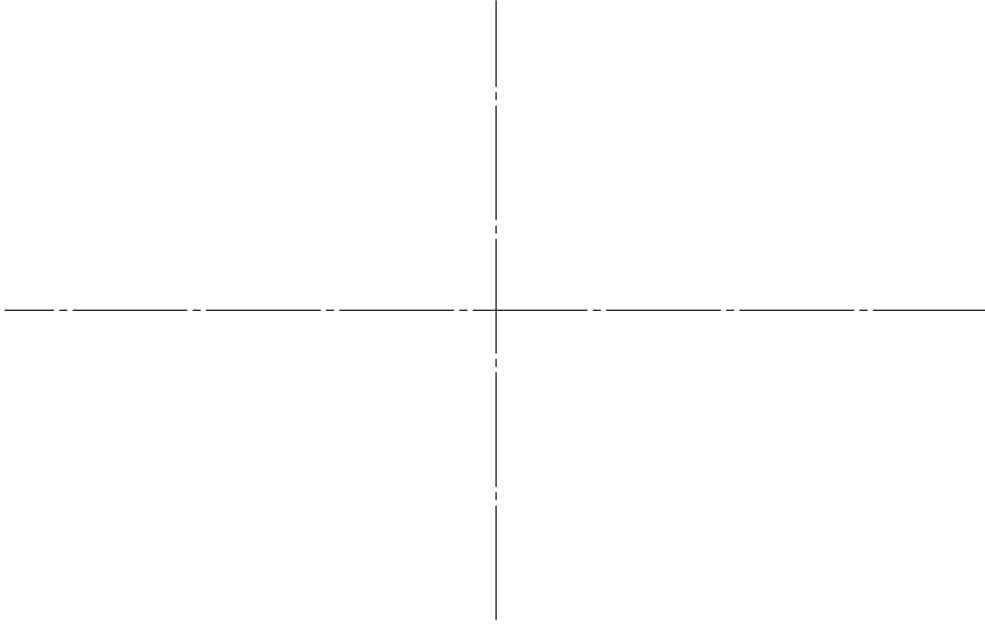
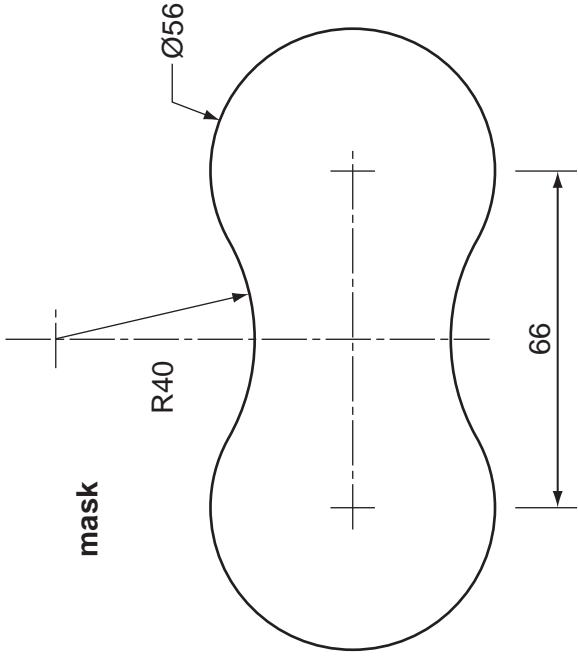
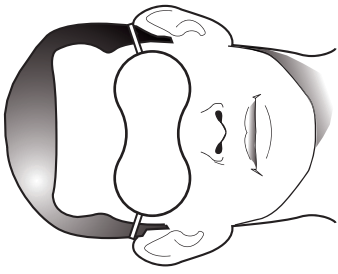
[Turn over

For  
Examiner's  
use

one side of octagonal sign

**A3** Passengers on long flights use masks to help them sleep.

The sketch on the right shows a design for a card sleep mask.



**(a)** Draw full size on the centre lines given, the outline of the mask. [8]

In use, the masks were found to be uncomfortable.

**(b)** In the space to the right, sketch a modification to the card mask that will give a better fit over the nose. [2]

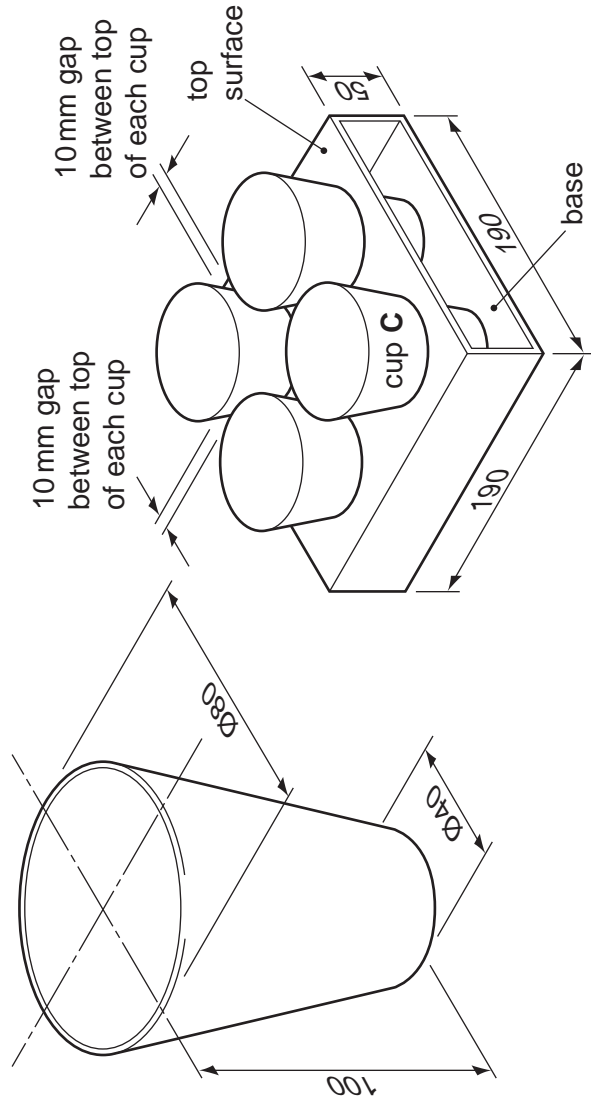
**Section B**

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

**B4** A pictorial view of a drinking cup and a card drinks tray is shown below.  
The drinking cup is made from 2 mm polystyrene. The cup sits on the base of the card drinks tray.  
The drinks tray is made from 4 mm thick card.

Draw to a scale of 1 : 2 in the space to the right:

- (a) a plan view and a front elevation of the card drinks tray; [5]
- (b) the centre positions of the four holes with drinking cup **C** in position on the plan view; [13]
- (c) drinking cup **C** in position on the front elevation; [3]
- (d) the correct size hole that is needed in the top surface to support the drinking cup in one of the three remaining positions on the plan view. [4]



SCALE 1 : 2

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[Turn over

**B5** The numbers and types of flight leaving a local airport over a five year period are shown below.

type of flight	year				
	2005	2006	2007	2008	2009
<b>internal</b>	52	75	60	65	70
<b>short haul</b>	85	90	96	104	108
<b>long haul</b>	30	45	52	58	65
<b>freight</b>	100	120	110	125	130
<b>private</b>	45	30	35	48	55

**(a)** In the space below, draw a pie chart to show how the flights in 2006 were distributed.

Label the **two** largest types of flight.

[9]

**(b)** In the space below, draw a suitable two-dimensional chart to show the increase in long haul flights from 2005 to 2009.

Use colour and labels to enhance your illustration.

[9]

**(c)** The 2009 figures for freight and private flights are to be shown in an Annual report.

In the space below, sketch a symbol that will represent each type of flight.  
The symbols must also represent the numbers of each type of flight.

Use colour and labels to enhance your illustration.

[7]