

Question No.1

In the title (name) blocks printed at the bottom of each sheet, print in freehand simple block letters your name and surname, your class and the date.

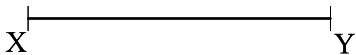
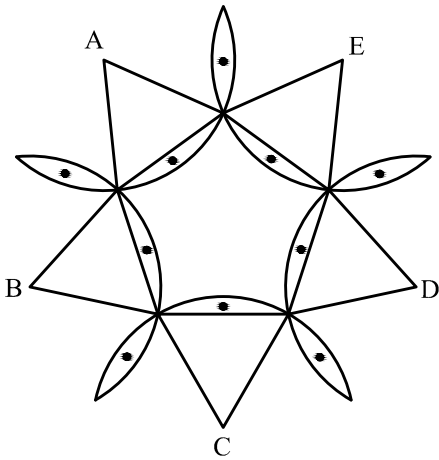
6 marks

Question No. 2

The design shown is based on a regular pentagon, equilateral triangles and arcs. Make a similar drawing using the following instructions:

- draw a regular pentagon on the given base XY,
- using the compass, construct an equilateral triangle on each face on the pentagon,
- with compass on each vertex A, B, C, D and E, draw arcs to form the shape shown in the figure,
- colour or shade the parts marked with a spot.

16 marks



Question No. 3

A telecommunications antenna is built up of many parts forming different triangles as shown at the side.

In the spaces provided below, write down neatly and in block letters:

- (i) the name of triangles 'A' and 'B' **by angles**,
- (ii) the name of triangles 'C' and 'D' **by sides**,
- (iii) the name and value of angle 'E'.

12 marks

TRIANGLE 'A' _____
(acute-angled, obtuse-angled or right-angled)

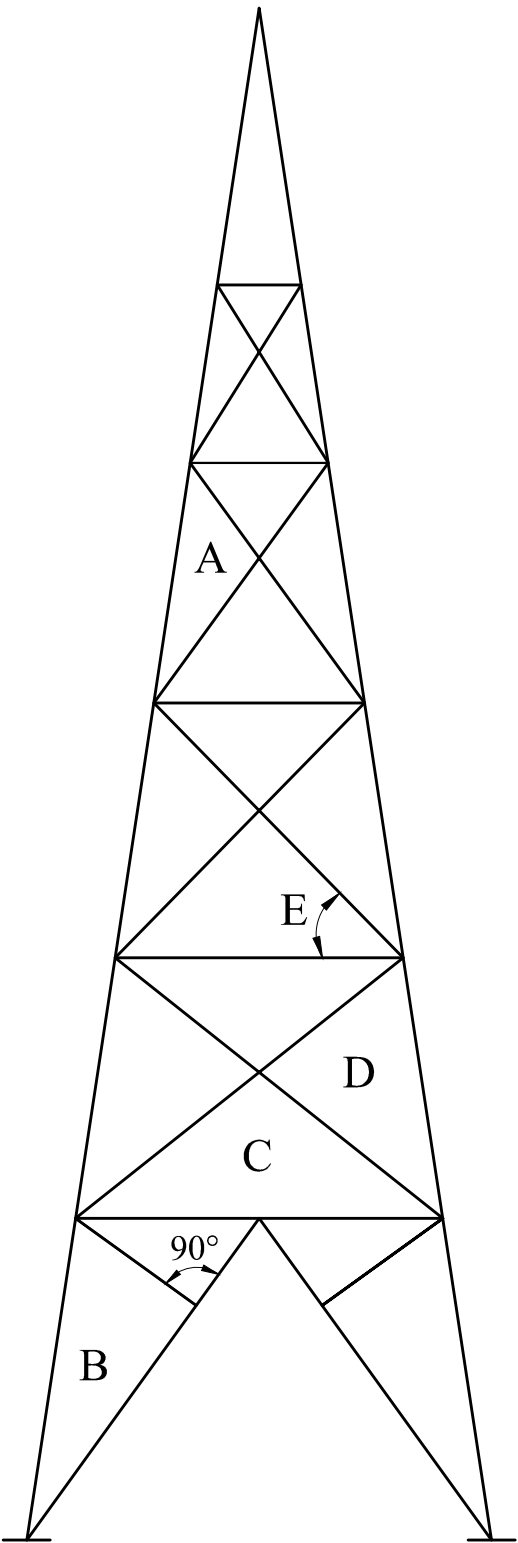
TRIANGLE 'B' _____
(acute-angled, obtuse-angled or right-angled)

TRIANGLE 'C' _____
(scalene, equilateral or isosceles)

TRIANGLE 'D' _____
(scalene, equilateral or isosceles)

THE NAME OF ANGLE 'E' _____
(acute, obtuse or right-angle)

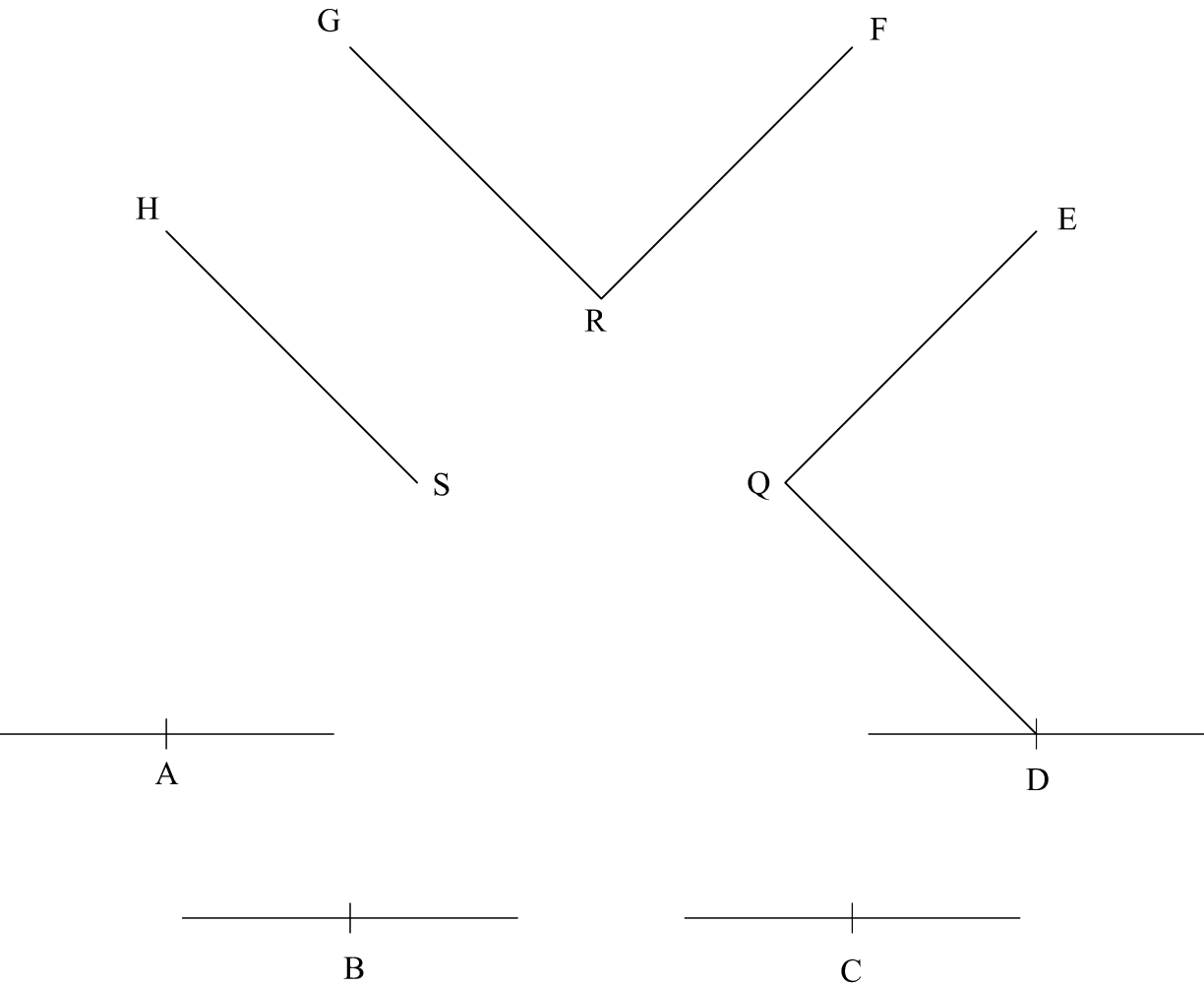
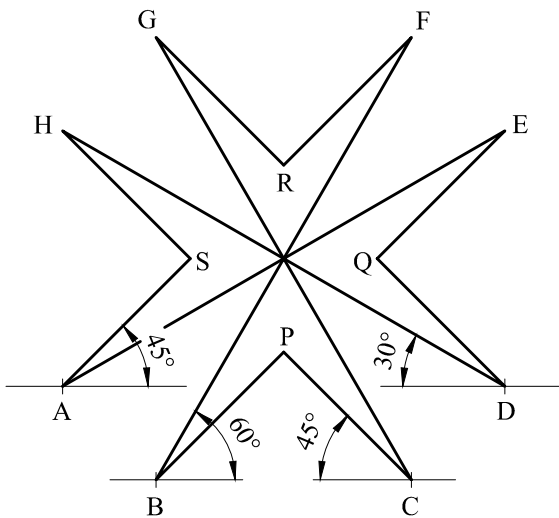
THE VALUE OF ANGLE 'E' _____°



Question No. 4

The Maltese Cross shown consists of a number of straight lines drawn at different angles of 30°, 45° and 60°. A similar but bigger drawing has been started below. You are required to complete the drawing of the Maltese Cross according to the given angles as explained below. The 45° angle at 'A', the 60° angle at 'B' and the 30° angle at 'D' must be done by construction using the compass and ruler only. All other angles are to be drawn using the set-squares. *Note: It is important to be accurate during the construction of the angles.*

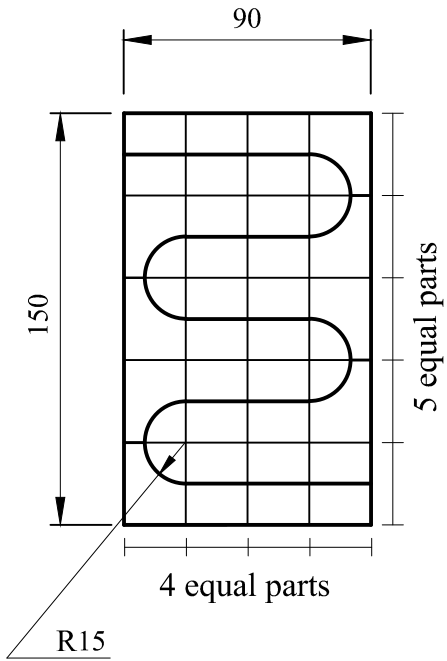
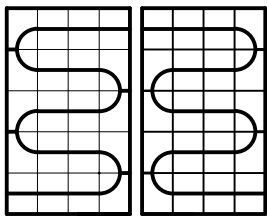
14 marks



Question No. 5

A gate consisting of two doors is shown at the side. Using the start lines given at the bottom, make a full size drawing of the **right-hand door** of the gate shown below. Show all constructions necessary to divide the 150mm into five equal parts (using the **set-square method**) and to divide the 90mm into four equal parts (using the **compass method**).

16 marks

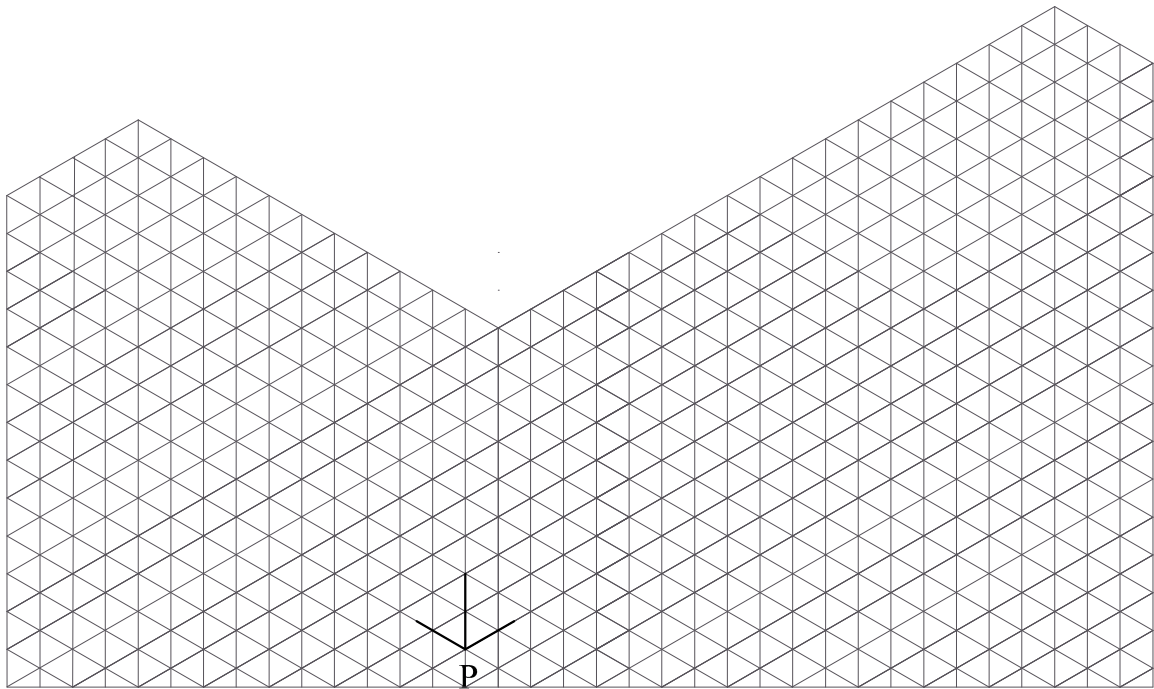
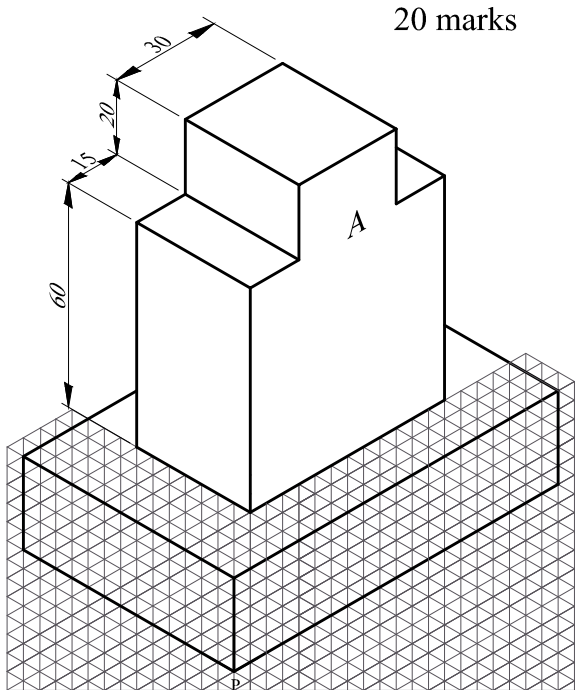


RIGHT-HAND DOOR



Question No. 6

A pedestal used as the base of a statue of a famous person is drawn in **isometric projection**.
(a) Make a similar drawing using the grid for the lower part and set-squares for the upper part to the given dimensions. Start from the lowest point P.
(b) On the side marked 'A' draw a rectangle in isometric projection on which the name of the person shall be printed. Choose your own dimensions.
Lightly shade the rectangle drawn.

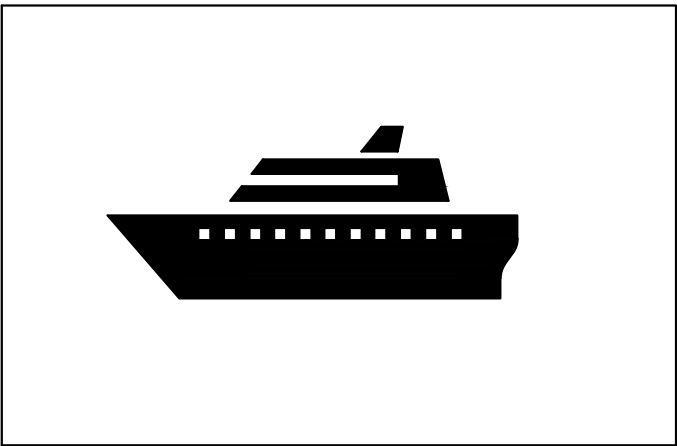
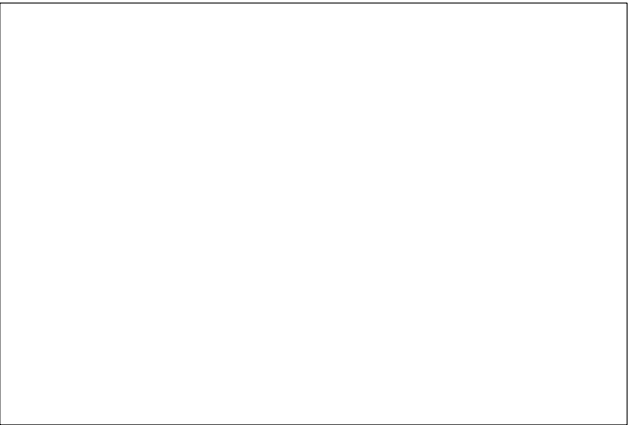
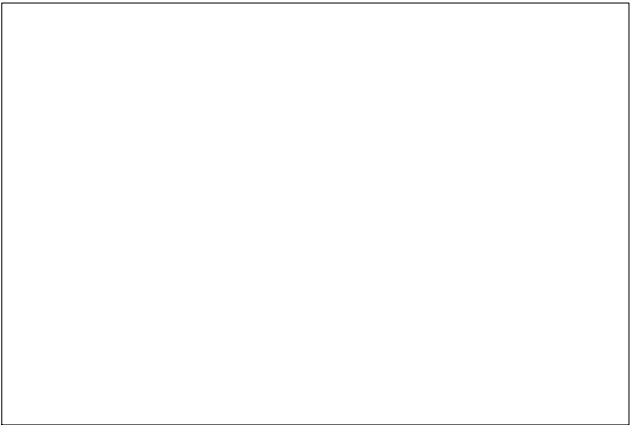


Question No. 7

Two **general information signs** are needed, one to indicate the way to the Ferry Terminal (harbour) and the other to indicate the way to the Air Terminal (airport).
The sign of the Ferry Terminal (shown below) has been completed. You have been asked to draw the sign of the **AIR TERMINAL**.
In the spaces provided below,
(a) draw two rough sketches to show your developing ideas,
(b) draw the final **general sign** (using the same style as the one shown below) to indicate the way to the **Air Terminal**.
*Notes: Do not add words to your drawings.
Make use of drawing instruments, where required, to finish your final drawing.*

16 marks

ROUGH SKETCHES



FERRY TERMINAL



AIR TERMINAL