

AN ROINN OIDEACHAIS
(Department of Education).
BRAINNSE AN MHEADHON-OIDEACHAIS
(Secondary Education Branch).

LEAVING CERTIFICATE EXAMINATION, 1938.

HONOURS.

MECHANICAL DRAWING AND DESIGN.
BOYS AND GIRLS.

WEDNESDAY, 22nd JUNE.—AFTERNOON, 4 TO 6 P.M.

BOYS ONLY.

NOTE.—The use of mathematical instruments, protractors, scales, T- and set squares, and drawing-boards is allowed. All construction lines must be clearly shown. The number of the question must be distinctly marked by the side of each answer. Both sides of the paper may be used. Questions marked (*) have accompanying diagrams. The number of marks assigned to each question is stated in brackets after the question.

- *Q. 1. Copy the given pattern to the dimensions indicated. [10]
- *Q. 2. The diagram shows a cross-section of a moulding. Draw full-size to the dimensions given. Determine all points of contact. [10]
- Q. 3. A line 3 inches long on a drawing represents 25 yards. Construct a diagonal scale for the drawing to measure 30 yards and show feet. Using the scale, draw a triangle having its altitude 9 yards 1 foot, one side 14 yards 2 feet, and base 12 yards. [10]
- *Q. 4. The plan, front and side elevations of a Book-end are shown in the diagram. Draw a new elevation on a ground-line parallel to X' Y'.
Scale $\frac{1}{2}$ inch to 1 foot. [14]
- *Q. 5. The diagram represents a wrench. Draw full-size to the dimensions indicated. [9]
- Q. 6. Make a design for the side and back of a Book-jacket. The side is to be 12 inches by 8 inches, and the back 2 inches wide. An essential part of the design must be the title, **na Séasúir**, in Gaelic letters,

OR,

THE SEASONS, in Roman letters. State the process by which your design could be reproduced.
Scale, $\frac{1}{2}$ full-size. [22]

GIRLS ONLY.

NOTE.—The use of mathematical instruments, protractors, scales, T- and set squares, and drawing-boards is allowed.

All construction lines must be clearly shown.

The number of the question must be distinctly marked by the side of each answer. Both sides of the paper may be used.

Questions marked () have accompanying diagrams.

The number of marks assigned to each question is stated in brackets after the question.

*Q. 1. A border for embroidery is shown in the diagram. Draw two repeats according to the figured dimension. [8]

*Q. 2. Copy the Celtic ornament shown in the diagram. Show clearly how all points of contact are determined. [11]

*Q. 3. Show by using instruments how you would set out the geometrical framework of the given diaper pattern. It will be sufficient to complete *half* the diagram. [8]

*Q. 4. The elevation is given of a lamp-shade in the form of a truncated cone.

Draw the shape of the piece of material which would accurately fit around the shade. All constructions must be clearly indicated. Scale which need not be drawn) $1\frac{1}{2}$ inches to 1 foot. [12]

*Q. 5. The diagram shows the side-elevation of a circular powder-box, with the lid partly open.

Draw the plan of the box, and show on the plan how you would project the given ornament on to the lid. The true shape of the lid with the ornament thereon is given. [14]

Q. 6. Make a design for the side and back of a Book-jacket. The side is to be 12 inches by 8 inches, and the back 2 inches wide. An essential part of the design must be the title, **na Séasúir**, in Gaelic letters.

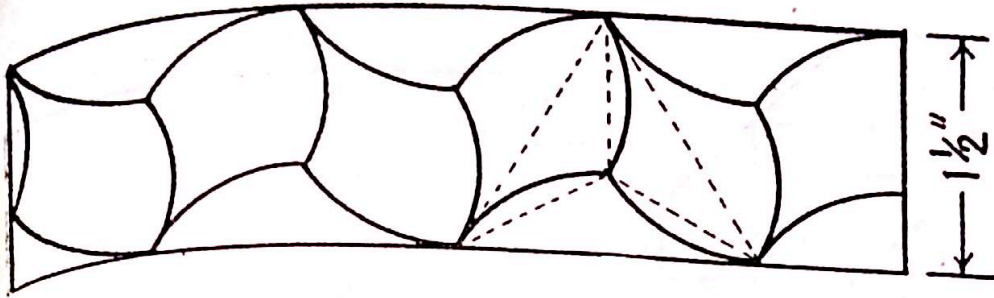
Or,

THE SEASONS in Roman letters. State the process by which your design could be reproduced.

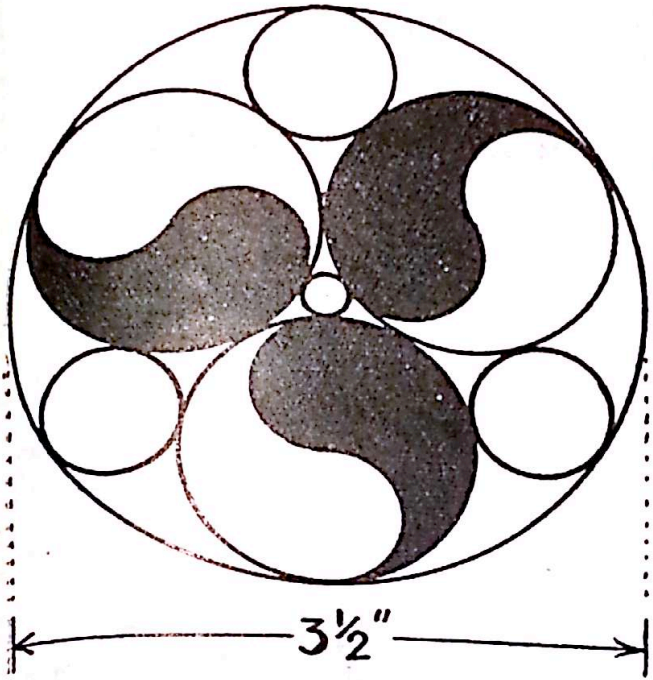
Scale, $\frac{1}{2}$ full-size.

[23]

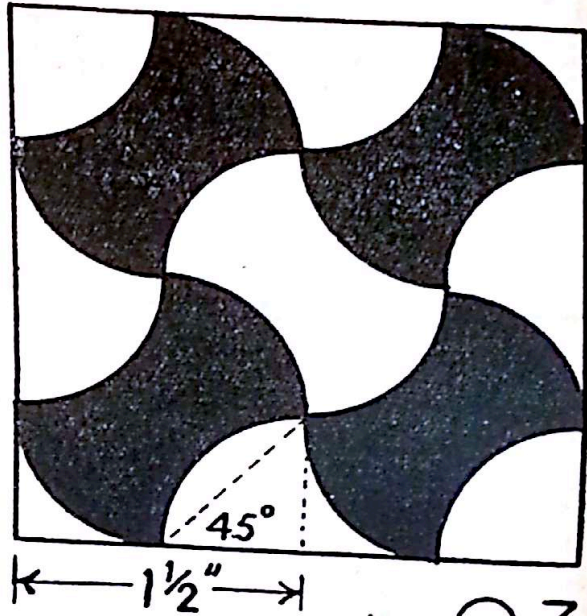
GIRLS ONLY.



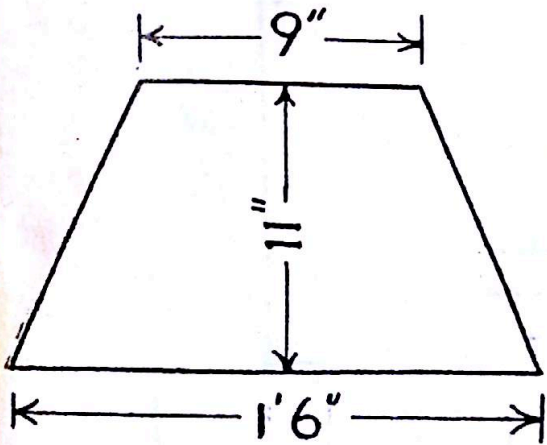
Q.1.



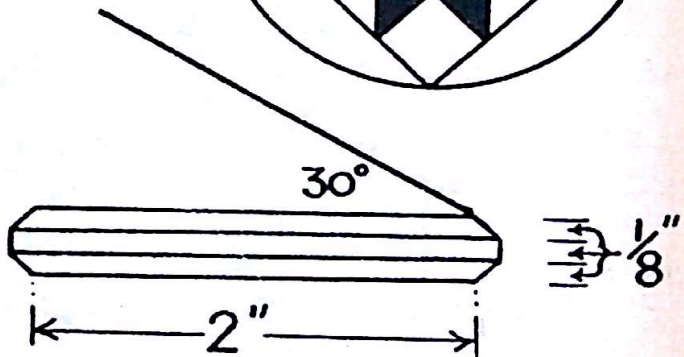
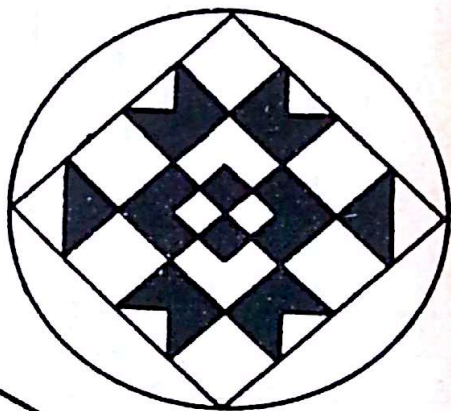
Q.2.



Q.3.

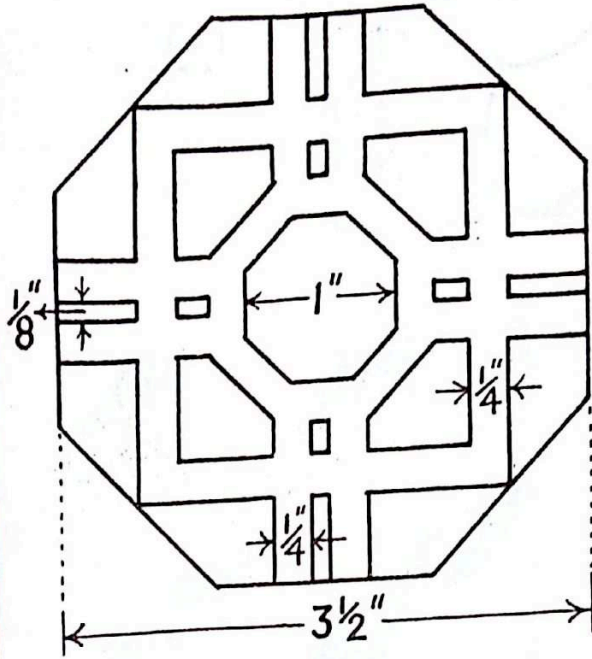


Q.4

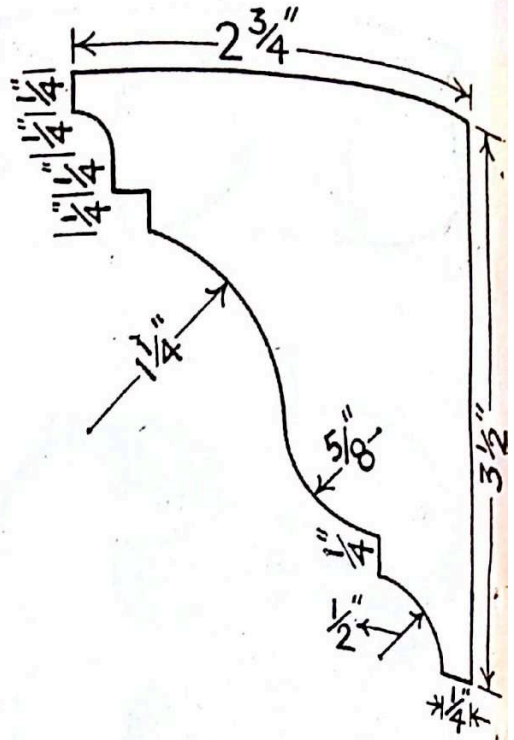


Q.5

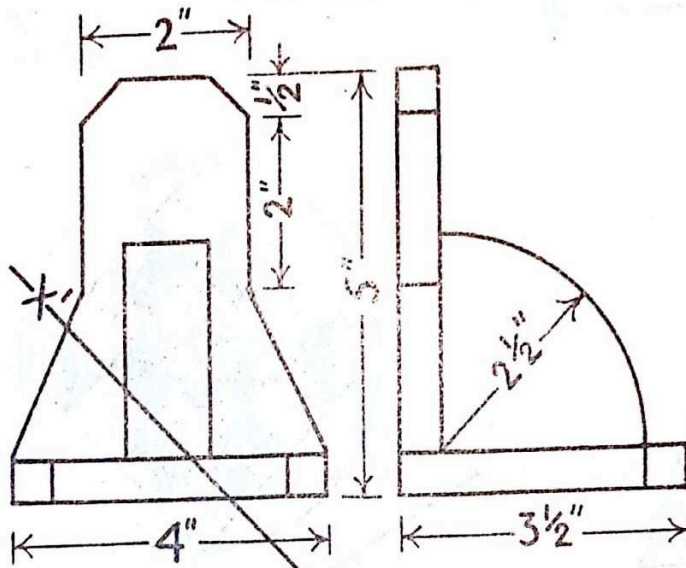
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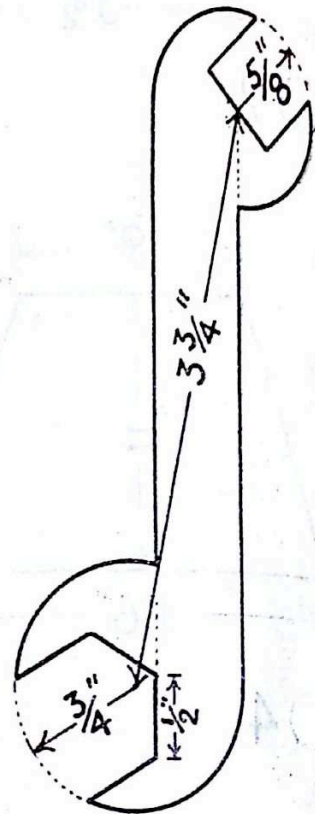
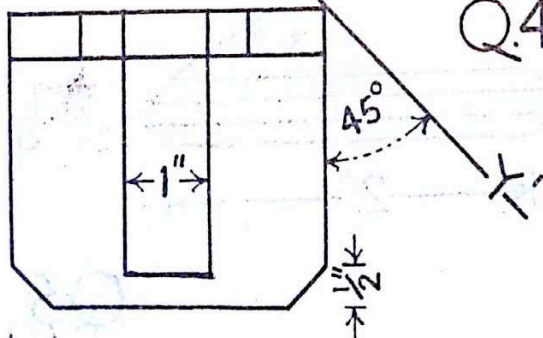
Q.1.



Q.2.



Q.4.



Q.5.