

AN ROINN OIDEACHAIS
(Department of Education).

LEAVING CERTIFICATE EXAMINATION, 1942.

MECHANICAL DRAWING AND DESIGN.

Course B.—Honours.

BOYS AND GIRLS.

WEDNESDAY, 17th JUNE.—MORNING, 11.15 TO 1.15 P.M.

BOYS ONLY.

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

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.

Only THREE questions to be attempted, the questions may be taken from SECTION A, or SECTION B.

All questions carry equal marks.

SECTION A.

(The questions in this Section must be solved accurately with the aid of drawing instruments. All lines used in constructions should be clearly shown.)

*Q. 1. An outline dimensioned diagram of a Dressing-table is given. Draw the diagram to the scale of $1\frac{1}{2}$ inches to 1 foot. An ordinary divided rule may be used as a scale.

*Q. 2. The diagram represents a Water-tap. Draw the tap full-size to the dimensions indicated on the diagram.

*Q. 3. The diagram shows the plan and elevation of a Petrol Pump.

Draw a new elevation on X' Y'.

Q. 4. Draw a plan of a brooch which shows as a hexagonal frame with six circular stones, each touching two others and two sides of the frame. The hexagon is $2\frac{1}{2}$ " side.

SECTION B.

*Q. 5. Draw a design for a circular China Plate, 12 inches diameter.
Scale : half full-size.

The design must be based on the plant (Nasturtium) illustrated in the diagram.

(Colour MAY be used in answering this question.)

Q. 6. Make a design for an all-over pattern based on rectangles 4 inches by 2 inches. Your ornament may be Celtic, Floral or Geometrical, and finished in two colours or in black and white.

One repeat should be completed and the main lines of the adjacent repeats shown.

Q. 7. Draw a design for a Poster to occupy a rectangle $5\frac{1}{2}$ inches by 3 inches, to be printed in black and white on a coloured ground, or in two colours on a white ground. The poster is to advertise "Books".

(Colour MAY be used in answering this question.)

Q. 8. Draw a design for the top of a packet ; the design to occupy a rectangle $4\frac{1}{2}'' \times 3''$ and the word SOAP to form part of it.

(Colour MAY be used in answering this question.)

GIRLS ONLY.

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

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.

Only THREE questions to be attempted. The questions may be taken from SECTION A, or SECTION B.

All questions carry equal marks.

SECTION A.

(The questions in this Section must be solved accurately with the aid of drawing instruments. All lines used in constructions should be clearly shown.)

*Q. 1. An ornamental symbol for embroidery is shown on the diagram. Make full-size, a properly constructed drawing of the diagram, using the dimensions given.

*Q. 2. Draw with instruments the geometrical basis on which the given repeating pattern is constructed.

It will be sufficient to complete *half* the diagram.

*Q. 3. The diagram shows a circular table mat. Draw the diagram full-size to the dimensions shown.

Q. 4. Draw a plan of a brooch which shows as a hexagonal frame with six circular stones, each touching two others and two sides of the frame. The hexagon is $2\frac{1}{2}$ " side.

SECTION B.

*Q. 5. Draw a design for a circular China Plate, 12 inches in diameter.

Scale: half full-size.

The design must be based on the plant (*Nasturtium*) illustrated in the diagram.

(Colour MAY be used in answering this question.)

Q. 6. Make a design for an all-over pattern based on rectangles 4 inches by 2 inches. Your ornament may be Celtic, Floral, or Geometrical, and finished in two colours or in black and white.

One repeat should be completed and the main lines of the adjacent repeats shown.

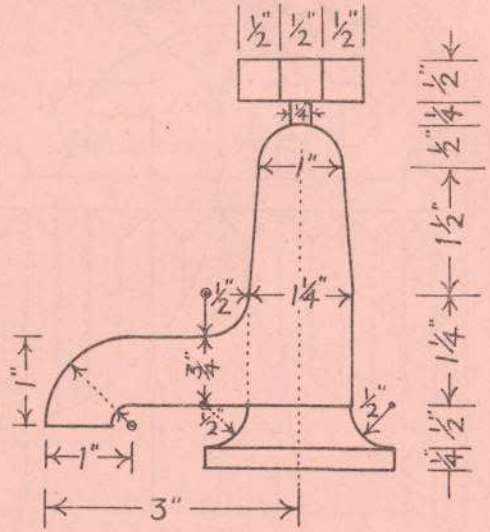
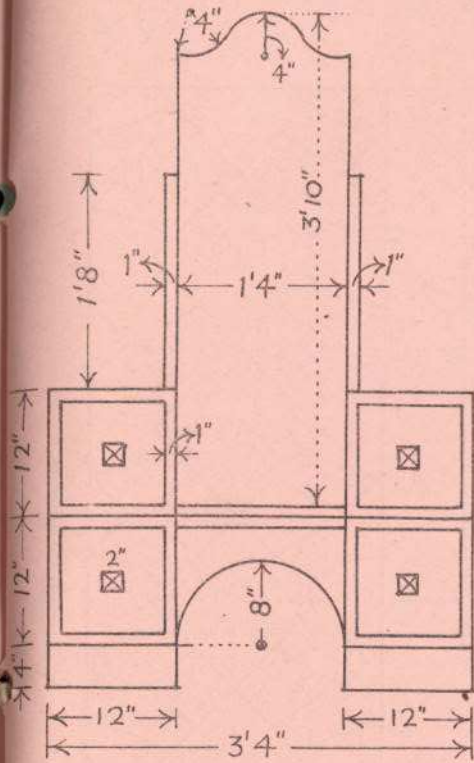
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(Colour MAY be used in answering this question.)

Q. 8. Draw a design for the top of a packet; the design to occupy a rectangle $4\frac{1}{2}$ " \times 3", and the word SOAP to form part of it.

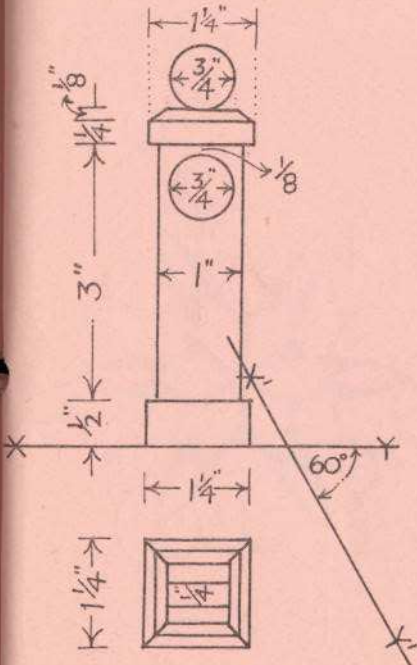
(Colours MAY be used in answering this question.)

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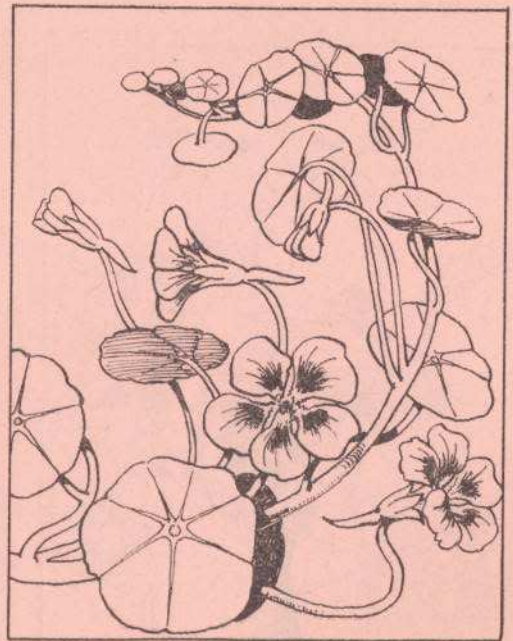


Q.2.

Q.1.



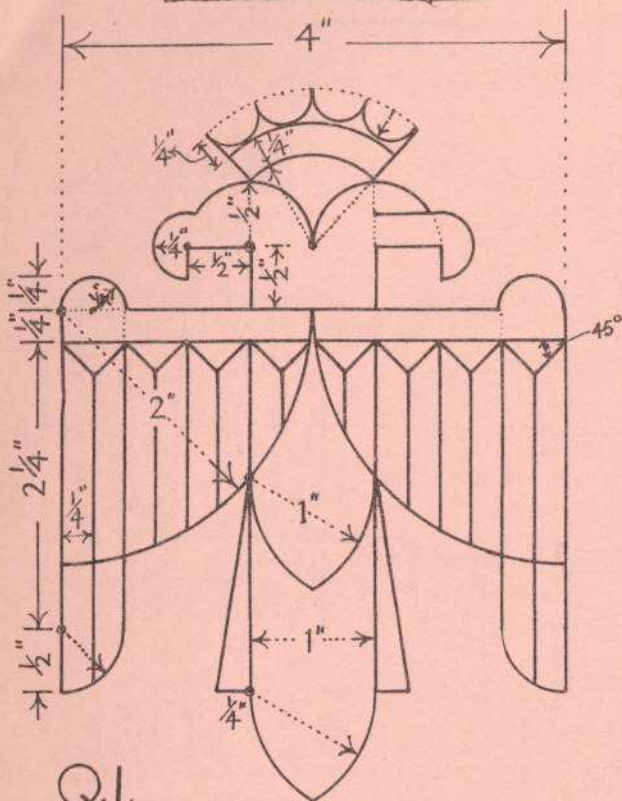
Q.3.



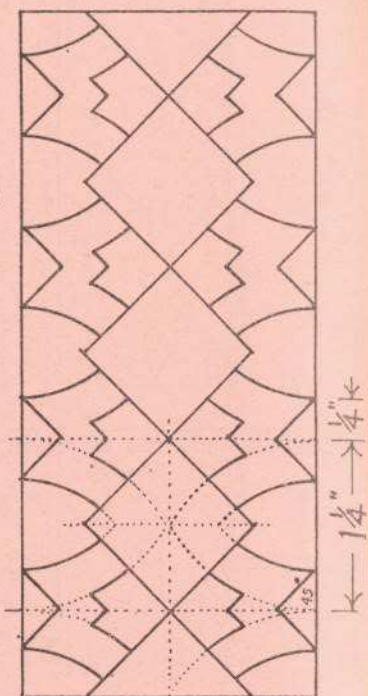
Q.5.

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Q.2.



Q.3.

