AN ROINN OIDEACHAIS
(Department of Education).

BRAINNSE AN MHEADHON-OIDEACHAIS
(Secondary Education Branch).

LEAVING CERTIFICATE EXAMINATION, 1936.

HONOURS.

MECHANICAL DRAWING AND DESIGN.

BOYS AND GIRLS.

TUESDAY, 23rd 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. Draw the given diagram of a wireless receiver according to the figured dimensions. [10]

*Q. 2. Draw to a scale of 1 inch to 1 foot the iron grille shown in diagram. [10]

Q. 3. Draw a diagonal scale one-eight of full size, by which feet and inches may be measured up to 3 feet. Draw to this scale a rectangle of 1 foot 7 inches by 10 inches. [9]

*Q. 4. The figure shows the plan and elevation of a mirror and stand. Draw an elevation of the mirror and stand when the mirror is tilted at an angle of 45° to the horizontal plane. [12]

*Q. 5. The diagram gives the plan, the front and side elevations of a grandmother's clock. Draw a new elevation of the clock when the front is inclined at an angle of 30° to the vertical plane. Scale 1 inch to 1 foot. [12]

Q. 6. Make a design for a hanging-sign to be suspended over a door or porch. The design may be any ornamental shape 5 inches by 3 inches outside measurement including a moulding or frame. The words "AN MARSAD" or "THE MARKET" in bold lettering to form an important feature of the design.

State the material in which the design could be suitably carried out. [22]

GIRLS ONLY.

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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. About a circle of one inch radius; draw a triangle circumscribing the circle, its angles being respectively **75°**, **70°** and **35°**; join the points where these lines are tangents to the circle, and write down the value of the angles of the triangle thus formed. [8]

*Q. 2. The diagram shows a mirror-frame. Draw the frame to the dimensions indicated. Show clearly how the points of contact are determined. [11]

*Q. 3. Copy the D'Oyley shown in diagram using the figured dimensions. [10]

*Q.4. Draw the given repeating pattern to the dimension shown. [10]

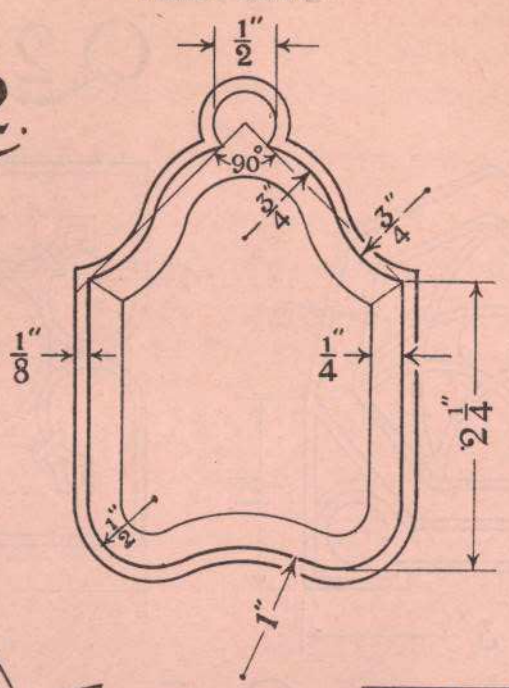
*Q. 5. The front and side elevations of a coal-box are given.

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

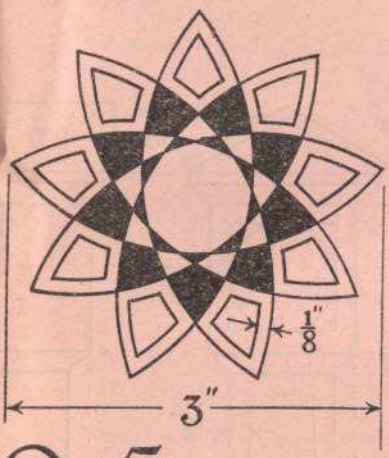
Q. 6. Draw a design for the lid of an octagonal biscuit-box. The design is to occupy a regular octagon of $1\frac{3}{4}$ inch side; and the word "**BRIOSCAÍ**" or "**BISCUITS**" is to form an essential part of the design.

State the material for which your design is intended. [22]

Q 2.



Q 3



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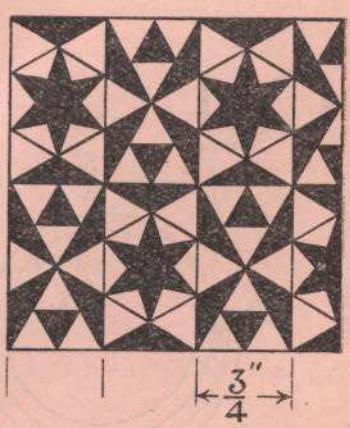
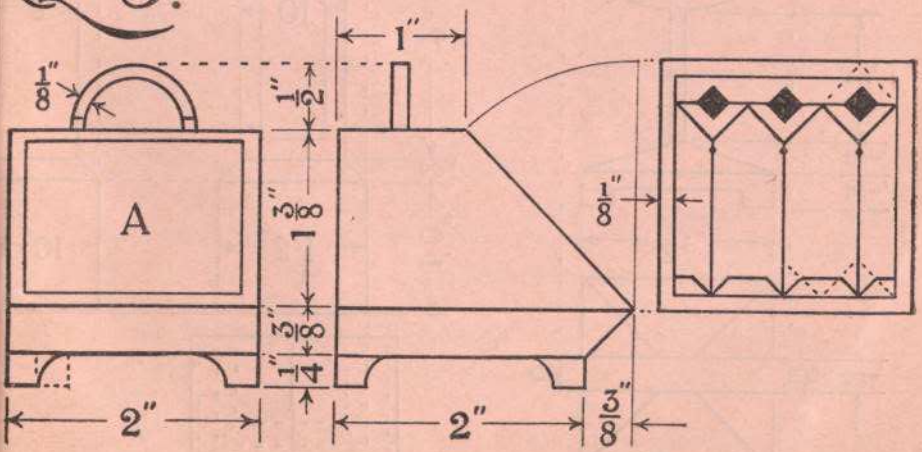
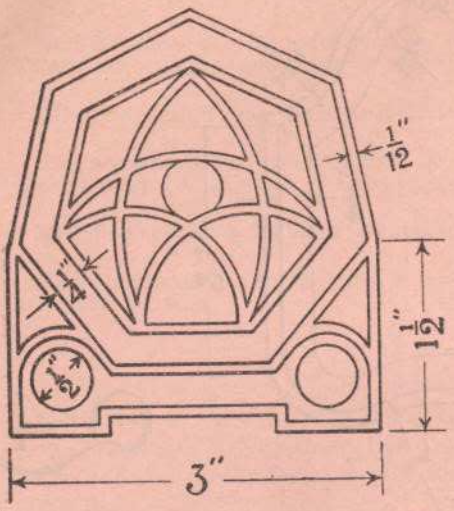


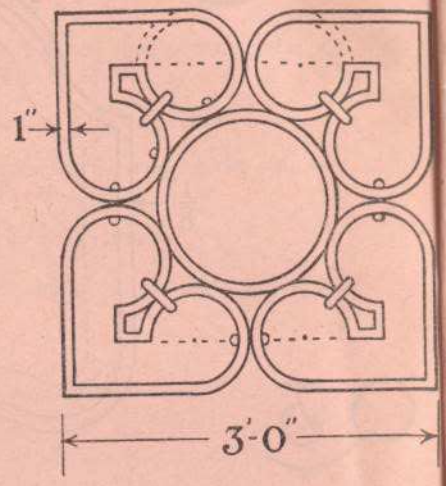
Q 5.



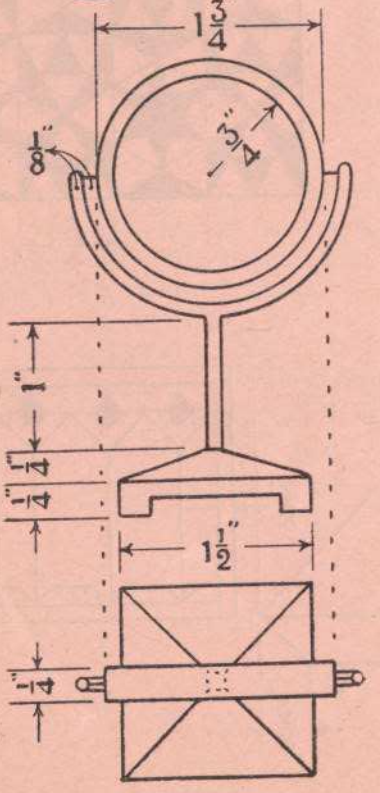
Q1.


1/12"
1/4"
1 1/2"
3"

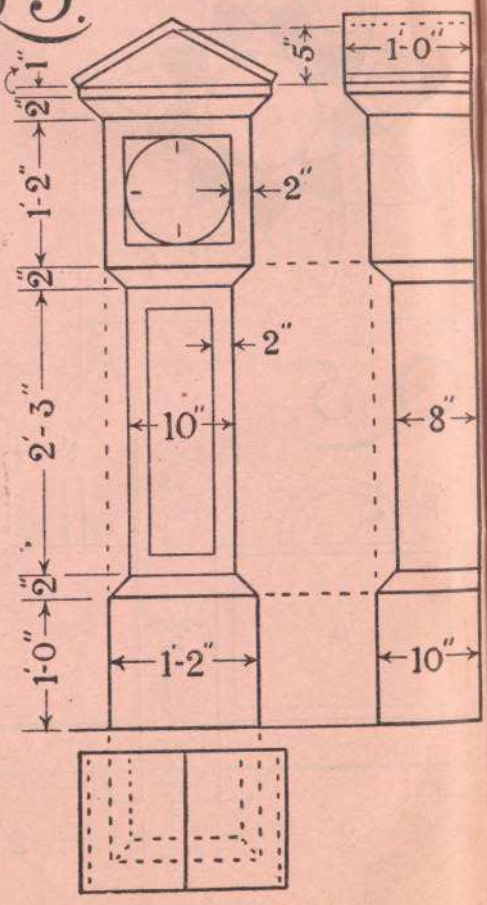
Q2.


1"
3'-0"

Q4.


1 3/4"
1/8"
3/4"
1"
1/4"
1/4"
1 1/2"
1/4"

Q5.


1"
2"
1'-2"
2"
2"
2'-3"
10"
8"
2"
1'-0"
1'-2"
10"
5"
1'-0"