AN ROINN OIDEACHAIS.

AN BHRAINSE GHAIRM-OIDEACHAIS.

CERTIFICATE EXAMINATIONS
for
DAY VOCATIONAL COURSES, 1948.

MECHANICAL DRAWING.

Wednesday, June 30th—10 *to* 1 *p.m.*

INSTRUCTIONS.

(*a*) *Not more than four* questions may be attempted, two of these to be selected from Section A and two from Section B.

(*b*) Accuracy and neatness are essential. A maximum of 10 marks will be awarded for neat arrangement.

(*c*) The number of the question must be distinctly marked by the side of each answer.

(*d*) Work on one side of the paper only.

SECTION 1.

1. Draw an isometric view, to the given dimensions, of the steps shown in orthographic projection Fig. 1.

[25 marks.]

2. From the oblique view, Fig. 2 draw a front elevation, plan and end elevation looking in the direction of the arrow. Title your drawing " SPINDLE BASE " in lettering $\frac{1}{4}$" high. Put in six of the main dimensions which should include length, width, circle diameter and a radius.

[25 marks.]

3. Fig. 3 is an isometric view of a dust tray. The sides are vertical and the end slopes at 60° to the base. Show a complete development to the same scale. (Neglect allowance for joining).

[25 marks.]

[P.T.O.

4. Fig. 4 shows the end elevation of a 2″ cube. Draw this elevation and complete the projections by drawing the front elevation and plan. Show an elevation and plan of the section made by cutting plane A.B. which is at 80° to the horizontal.

[25 marks.]

Section 2.

5. Fig. 5 is a centre line diagram of a piece of bent ironwork. The setting out is a triangle as shown. Draw the figure and show clearly the method of finding the centres of the tangential circles which are $\frac{3}{4}$″ in radius. The centres of the top circles are on a horizontal line through the apex of the triangle. All constructions must be clearly shown and no credit will be given for guess work.

[20 marks.]

6. A.B.C.D. Fig. 6 is a rectangular piece of plywood 7″ ×3″. It is required to cut from it a right-angled triangle of which A.D. is to be the hypotenuse. Show how to set out this triangle.

[20 marks.]

7. An irregular shaped field is shown in plan Fig. 7 to a scale of 100 yards to one inch. Using the scale accompanying the diagram set out the shape to the given dimensions.

Measure and write down the following :—

Length of diagonal A.C.

Length of side F. A.

Magnitude of angle D.E.F.

[20 marks.]

8. Draw a regular pentagon of a base 2″ then draw a similar figure having a diagonal $4\frac{1}{2}$″ long.

[20 marks.]

MECHANICAL DRAWING

...AY VOCATIONAL COURSES. 1948. CERTIFICATE EXAMINATIONS

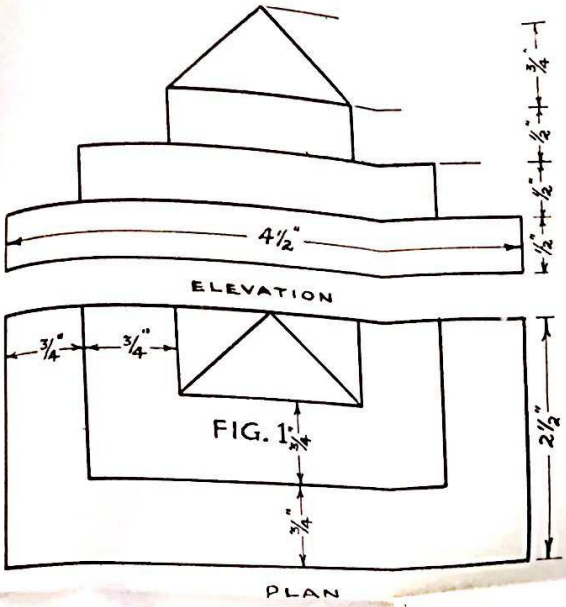


FIG. 1

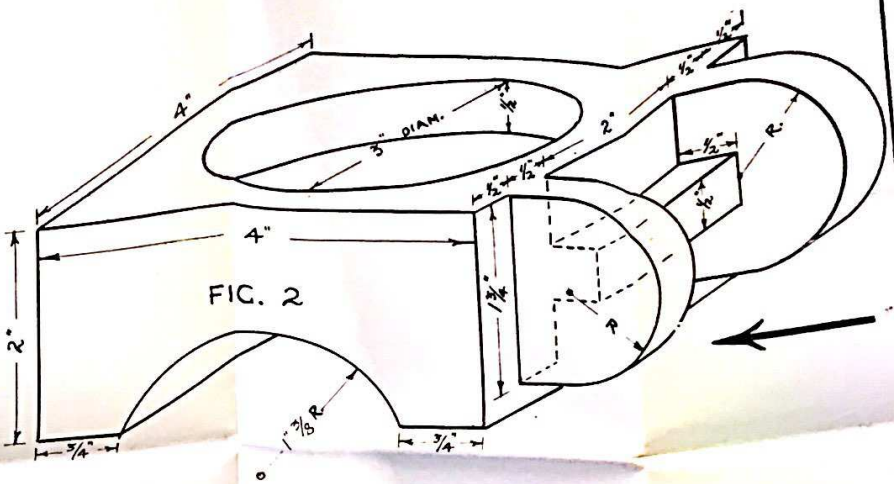


FIG. 2

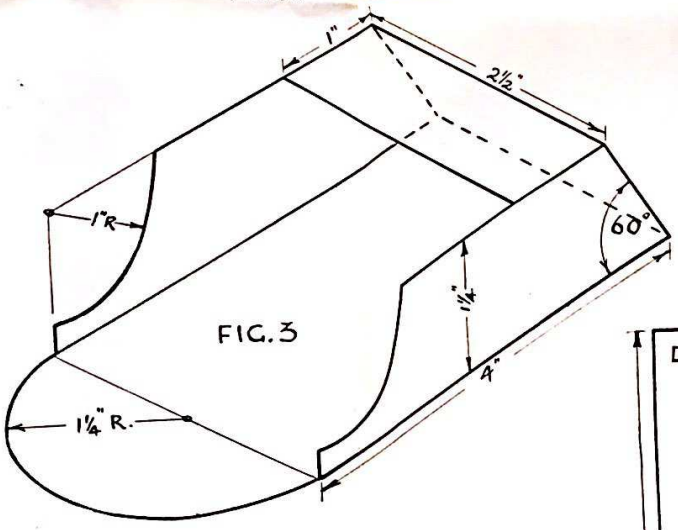


FIG. 3

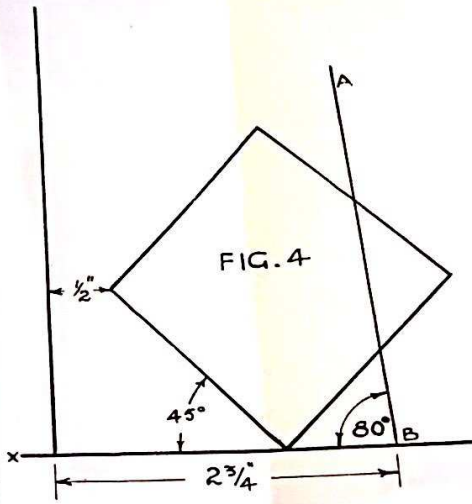


FIG. 4

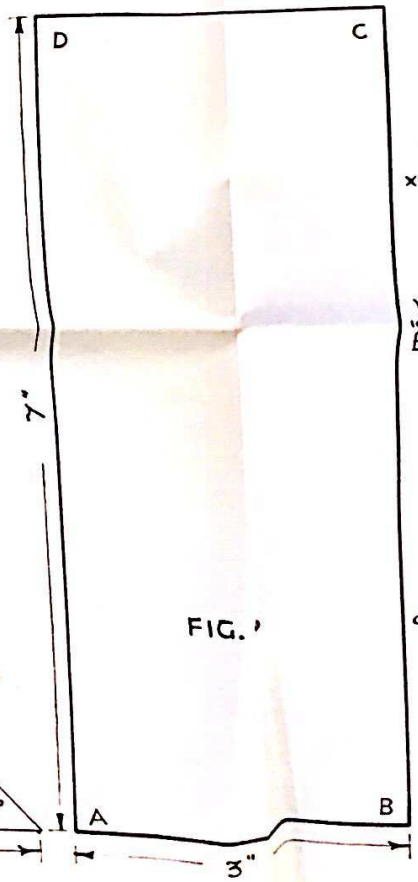
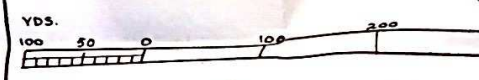


FIG. '



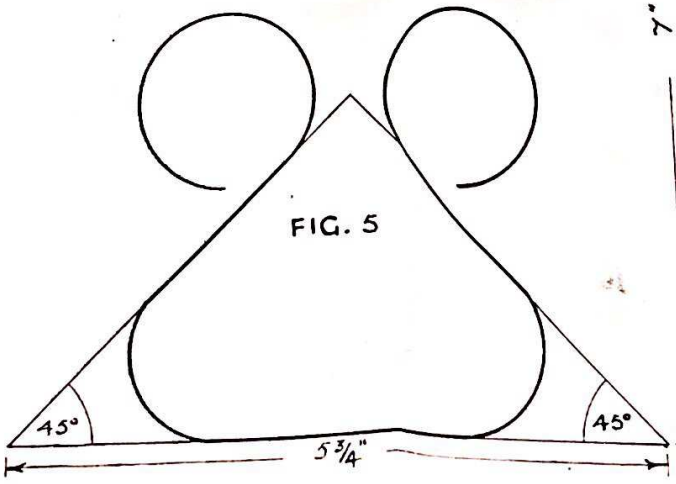


FIG. 5

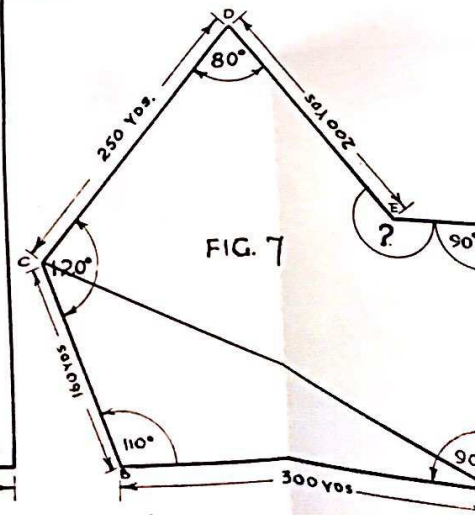


FIG. 7