## AN ROINN OIDEACHAIS

(Department of Education).

INTERMEDIATE CERTIFICATE EXAMINATION, 1943.

## ELEMENTARY MATHEMATICS (Arithmetic). FOR GIRLS ONLY.

TUESDAY, 15th JUNE.-MORNING, 10 TO 11.30

Six questions may be answered.

All questions carry equal marks.

Mathematical Tables may be obtained from the Superintendent.

- 1. 37 tons of turf cost £118 8s. What would be the cost of 62 tons?
- 2. Evaluate 0.46 of £2 10s.+2.125 of £4 8s.-4.32 of £1 16s. 8d.
  - 3. Express in simplest form:

(i) 
$$\left(\frac{5}{6} - \frac{3}{4} + \frac{2}{3}\right) \div \left(\frac{5}{6} + \frac{3}{4} - \frac{2}{3}\right)$$
;

- (ii) (3·67)2- (1·33)2.
- 4. Find the Simple Interest on £638 15s, from March 10th to May 29th at  $1\frac{1}{2}\%$  per annum.
- 5. A rectangular grass plot measures 80 yards by 60 yards. All round the plot on the outside there is a path  $2\frac{1}{2}$  feet wide. Find, correct to the nearest square yard, what is the area of the path.
- 6. Find the diameter of a circle whose area is one acre. Give the result correct to  $\frac{1}{10}$  yard.

$$\left[\pi = \frac{22}{7}\right]$$
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- 7. A sum of £6 2s. 6d. was divided between three girls, A, B, C, in proportion to their ages. A was 14, B was 12 and C was 9 years old. Find the amount that each girl received.
- 8. Three horses, A, B, C, were bought for £55, £70, £92, respectively, and sold at a profit of 10% of the amount paid for all three. A was sold at a loss of 15% and B at a profit of  $12\frac{1}{2}\%$ . For what amount was C sold?
- 9. A metal cylinder is 6 ins. high and 2½ ins. in diameter. Find the volume of the cylinder in cubic inches, correct to one place of decimals.

If one cubic inch of the metal weighs 4:3 ounces, what is the weight of the cylinder? Give the result correct to the nearest ounce.