

AN ROINN OIDEACHAIS
(Department of Education).

BRAINNSE AN MHEADHON-OIDEACHAIS
(Secondary Education Branch).

INTERMEDIATE CERTIFICATE EXAMINATION, 1938.

ELEMENTARY MATHEMATICS (Arithmetic).
FOR GIRLS ONLY.

MONDAY, 20th JUNE.—MORNING, 10 A.M. TO 12 NOON.

Six questions may be answered.

Mathematical Tables may be obtained from the Superintendent.

1. How often is 15 times £4 9s. 5d. contained in £201 3s. 9d ?
[16 marks.]
2. Find, correct to 2 decimal places, the value of $\sqrt{7} \div \sqrt{5}$.
[16 marks.]
3. Find the Simple Interest on £673 for $2\frac{1}{2}$ years at $3\frac{3}{4}\%$ per annum.
[16 marks.]
4. Simplify $\frac{.4 - .07}{1.2 + .12}$ of $1.09 \div .0436$.
[16 marks.]
5. A man bought two houses, one for £700 and the other for £800. He sold the latter at a profit of 6%, but he lost 4% on the sale of the former. Find his percentage gain on his total outlay.
[16 marks.]
6. Use the Tables, Page 33, to calculate how many pounds difference there is between the French *tonne* of 1000 kilogrammes and the English ton of 2,240 lbs.
[17 marks.]

7. Which is the greater speed, 15 miles per hour or 7 metres per second? Show that the greater exceeds the less by about $4\frac{1}{2}\%$.

[17 marks.]

8. A circular path is 2 yards wide and the radius of the outer boundary is 51 yards. Find the cost of cementing the path at 2s. 6d. per square yard.

[17 marks.]

9. A train leaves Drogheda for Dublin at 2.45 p.m. and arrives there at 3.47 p.m. Another train leaves Dublin at 3.15 p.m. and arrives at Drogheda at 3.51 p.m. The trains travel at uniform rates without stopping between the stations. Draw graphs to show the position of the trains between 2.45 p.m. and 3.51 p.m. Find from the graphs the time at which they pass each other.

[17 marks.]