

AN ROINN OIDEACHAIS

(Department of Education).

INTERMEDIATE CERTIFICATE EXAMINATION, 1950.

ELEMENTARY MATHEMATICS (Arithmetic).

FOR GIRLS ONLY.

TUESDAY, 6th JUNE.—MORNING, 10 TO 12.

Six questions may be answered.

All questions carry equal marks.

1. How much is 40 times £24 19s. 9d. less than £1,000? Express your answer (i) as a decimal and (ii) as a percentage of £1,000.

2. Find the total cost of the following items :

4 pairs of gloves at 4s. 6d. per pair ;

$3\frac{1}{2}$ yards of cloth at 5s. 9d. per yard ;

$2\frac{1}{2}$ dozen buttons at 1½d. each ;

$1\frac{3}{4}$ lbs. of knitting wool at 1s. 3½d. per ounce ;

$1\frac{1}{2}$ gross of fasteners at 9d. per dozen.

Or,

2. Three sums of money are invested at Simple Interest as follows :
£240 at $2\frac{1}{4}\%$ per annum, £360 at $2\frac{1}{2}\%$ per annum and £400 at 3% per annum.

Find the total interest on those three sums for (i) one year,
(ii) $12\frac{1}{2}$ years.

3. Find the cost of 20 tons 14 cwts. at £6 13s. 4d. per ton.

4. A man bought 32 sheep at £4 10s. each. He lost 2 of the sheep and sold the remainder at a price per head which left him a profit of 25% on his total outlay. At what price per head did he sell them ?

[P.T.O.]

Or,

4. Simplify :

$$1\frac{1}{2} (2\frac{1}{5} - \frac{3}{4} \times 1\frac{2}{3}) \div \frac{7}{8} (3\frac{1}{7} \div \frac{1}{14} - 1\frac{1}{5}).$$

5. The diagonal of a square is 90.65 inches long. Find the area of the square (i) to the nearest square inch, (ii) to the nearest square foot.

6. Assuming that one cubic foot of water is equivalent to 6.23 gallons and that the weight of a cubic foot of water is 62.5 lbs., find to the nearest whole number :

(i) the weight in lbs. of a gallon of water,

(ii) the number of gallons in a ton of water.

Or,

6. The diameter of a cylinder is 2 feet 4 inches long and the cylinder is 11 feet 3 inches high. Find (i) the volume of the cylinder to the nearest cubic foot, (ii) the total surface area of the cylinder to the nearest square foot.

[Take $\pi = \frac{22}{7}$.]