

## INTERMEDIATE CERTIFICATE EXAMINATION, 1963,

## ELEMENTARY MATHEMATICS (Arithmetic).

## FOR GIRLS ONLY.

THURSDAY, 6th JUNE - Morning, 10 to 12.

All questions to be answered.

All questions carry equal marks.

1. Find the cost of 7 tons 4 cwts. at £8 16s. 8d. per ton.
2. Simplify:- (i)  $\frac{3\frac{1}{3} - 2\frac{7}{8}}{3\frac{2}{3} + 1\frac{5}{8}}$ , (ii)  $\frac{4\frac{1}{2} \times 3\frac{1}{3}}{7\frac{1}{2} \div 1\frac{1}{5}}$
3. Find the simple interest on £545 for ten years at 6% per annum.  
What sum of money invested at 6% per annum simple interest would amount to £368 after ten years ?
4. Find the cost of
  - (a) 7 lbs. of sugar at  $7\frac{1}{2}$ d. per lb.,
  - (b)  $3\frac{1}{2}$  lbs. of tea at 7s. 6d. per lb.,
  - (c)  $1\frac{1}{2}$  gallons of milk at  $5\frac{1}{2}$ d. per pint.,
  - (d)  $2\frac{1}{2}$  stones of potatoes at 19s. 4d. per cwt.
 Find, also, the total cost of these items.
5. (a) An athlete runs one mile in four minutes. Express his speed
  - (i) in miles per hour, (ii) in feet per second.
 (b) Express (i) 220 yards as a decimal of 5 miles, (ii) 54 seconds as a decimal of one hour.
6. Find the square root of (i) 44100, (ii) 0.0441.  
A square has an area of 70 square centimetres. Find, correct to two places of decimals, the length of a side in centimetres.
7. (i) A man bought an article for £80 and sold it for £100. What percentage profit did he make ?  
(ii) An article which cost 16s. was sold at a profit of  $8\frac{1}{3}\%$ . Find the selling price.  
(iii) When a man sold an article for £59 10s. Od. he lost 15% on it. What did it cost him ?
8. A solid cylinder, five inches in height, has a diameter of four inches. Find its volume in cubic inches, correct to the nearest cubic inch.  
If the cylinder is made of iron and if a cubic foot of iron weighs 450 lbs., find the weight of the cylinder in pounds, correct to the nearest pound.