

SHERBORNE SCHOOL.

SCHOLARSHIP EXAMINATION, 1937.

Arithmetic.

(1½ hours).

1. Find the value of $(3 - \frac{2}{5} + \frac{6}{11} - \frac{71}{110}) \div (\frac{5}{7} - \frac{3}{8} + \frac{11}{28})$.
2. Find the missing figures in the following addition sum:—

£	s.	d.
—	: 14	: 6
3	: —	: 8½
5	: 19	: —
38	: 12	: 9
3. Reduce 15 cwt. 3 qrs. 21 lb. exactly to the decimal of a ton, and find its value at £1 a ton.
4. A contractor engages 162 men to carry out a piece of work in 15 weeks. After 7 full weeks a frost stops all work completely for a fortnight. How many more men must be engaged to finish the work in time?
5. The value of $\frac{.6492 \times (2 \cdot 973)^2}{.319 \times .02465}$ was given as 7297, the decimal point having been omitted. What is the true value of the fraction assuming that the multiplication and division are correct? Show how you arrive at your conclusion.
6. A boat travels 8 miles up-stream in $1\frac{1}{4}$ hours and back in $\frac{3}{4}$ hour. Find the speed of the current.
7. Rain falls on a horizontal roof 18 ft. by 12 ft. and empties into a cylindrical tub of internal diameter 2ft. What fraction of an inch of rain has fallen on the roof when the water stands $3\frac{1}{2}$ ft. deep in the tub? ($\pi = 3.14$).
8. A bread and butter machine cuts and butters 68 slices for every two-pound loaf. If a two-pound loaf costs 5d. and butter is 2/2d. a lb. it is found that 1000 slices of bread and butter cost £1-3-6: estimate the number of slices to 1 lb. of butter.