

# County Council of Durham.

## EDUCATION DEPARTMENT

ADMISSION OF PUPILS TO GRAMMAR SCHOOLS, 1956.

### ARITHMETIC (Total Marks 100).

TUESDAY, 7TH FEBRUARY, 1956, 9.30 a.m. to 10.15 a.m.

Write your EXAMINATION NUMBER (not your name) and the name of your school at the top right hand corner of every sheet of paper used.

You may attempt all SIX questions, and answer them in any order.

Place the number of the question in the margin and leave a space after each answer.

**No Scrap Paper may be used. To obtain full marks you must show all your working on your answer paper.**

1. (a) Find the sum of the following numbers :—  
2763, 54, 498, 7. (5 marks)
- (b) Multiply three hundred and ninety seven by eight. (5 marks)
- (c) Divide £11 19s. 2d. by 7. (5 marks)
- (d) Subtract 9 yards 2 feet 9 inches from 13 yards 1 foot 8 inches. (5 marks)
- (e) What fraction must be added to  $\frac{5}{12}$  to make it equal to  $\frac{3}{4}$ ? (Give the answer in its simplest form). (5 marks)
  
2. (a) Find the cost of 76 tons at £3 19s. 11d. per ton. (5 marks)
- (b) When  $\frac{2}{5}$  of the children in a class were absent there were 25 present. How many are there in the class altogether? (5 marks)
- (c) Express the following as decimal fractions of £1—  
10 shillings, 15 shillings, a florin, a shilling, sixpence. (5 marks)
- (d) What is the total profit on 120 articles bought at 8 pence a dozen and sold at 1 shilling a dozen? (5 marks)
- (e) A rectangle is twice as long as it is broad. If the distance around the rectangle is 24 yards what is the area of the rectangle in square yards? (5 marks)

3. A class has 5 lessons in Arithmetic each week. Four of the lessons are each 40 minutes long and the fifth only lasts 25 minutes. The school meets for 40 weeks in the year. How many hours and minutes will a boy spend in studying Arithmetic during a year when he was absent for a fortnight due to illness? (10 marks)

4. A and B have £13 6s. 8d. between them. A and C have £10 13s. 4d. between them and A, B & C together have £20. How much money has A? (10 marks)

5. A family uses  $3\frac{1}{2}$  pints of milk a day. If milk is 5 shillings a gallon, what will their milk bill be for the two months March and April?

If the price of milk falls to  $6\frac{1}{2}$ d. a pint on May 1st how much will the milk bill be reduced for May and June? (15 marks)

6. An oblong sheet of steel is 10 feet long and 7 feet wide. From this a smaller sheet is cut out to leave a piece shaped like a picture frame and exactly 1 foot wide throughout.

If the weight of the steel sheeting is 1 lb.  $5\frac{1}{2}$  ozs. per square foot calculate in stones, pounds and ounces, the weight of (1) the piece shaped like a frame (2) the portion cut out. (15 marks)