

# County Council of Durham.

## EDUCATION DEPARTMENT

ADMISSION OF PUPILS TO GRAMMAR SCHOOLS, 1959

### ARITHMETIC (Total Marks 100)

TUESDAY, 3RD FEBRUARY, 1959, 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 :—  
4709, 36, 582, 9. (5 marks)
- (b) Divide 2984 by 8. (5 marks)
- (c) Add:—£2 13s. 9d., and 9s. 8½d., and subtract the total from £5. (5 marks)
- (d) Multiply 7 yards 2 feet 6 inches by 7. (5 marks)
- (e) By how much is  $\frac{7}{10}$  bigger than  $\frac{2}{5}$ ?  
Give your answer as a decimal fraction. (5 marks)
2. (a) How many hours and minutes are there between 9.43 a.m. Monday and 2.15 p.m. the following day (Tuesday)? (5 marks)
- (b) If 4 dozen articles cost £3 12s. 0d. what is the cost of each article? (5 marks)
- (c) A television mast is 750 feet high. By how many yards is this greater than 1 furlong? (5 marks)
- (d) How many 2½d. stamps can be bought for £2 10s. 0d.? (5 marks)
- (e) After spending  $\frac{1}{3}$  of his money and then sharing the remainder equally with his brother a boy had 7s. 8d. left.  
How much money had he at first? (5 marks)



3. One day a school has 255 pupils present. If  $\frac{4}{5}$  of those present each drank one bottle of milk, and 9 others have two bottles each, what is the total quantity of milk consumed by the pupils that day if each bottle contains  $\frac{1}{8}$  pint?

What is the cost of the milk consumed at 4s. 10d. per gallon?

(10 marks)

4. A shopkeeper buys 24 chairs for £69. Two which are slightly faulty he sells for £2 18s. 9d. each. The remainder he sells at £3 5s. 6d. each.

What profit does he make when all the chairs are sold? (10 marks)

5. The walls and ceiling of a rectangular room 15 feet long, 12 feet wide, and 8 feet high, are to be distempered. If  $\frac{1}{3}$  of the total area of walls and ceiling is occupied by doors, windows and fireplace, find the area to be distempered.

Find the cost of the distemper if one tin of distemper costs ~~5s. 6d.~~ and will cover 136 square feet.

(15 marks)

6. A man plans to go from A to B by car, and calculates that if he travels at 32 miles per hour he will complete his journey in exactly 45 minutes.

He leaves A and travels at 32 miles per hour, but after  $\frac{1}{2}$  hour is stopped by a puncture and held up for 10 minutes. If he then travels at 40 miles per hour for the rest of the journey how many minutes over the 45 he calculated will he have taken to reach B?

(15 marks)