

County Council of Durham

EDUCATION DEPARTMENT

ADMISSION OF PUPILS TO GRAMMAR SCHOOLS, 1962

ARITHMETIC (Total Marks 100)

TUESDAY, 6TH FEBRUARY, 1962, 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:—
49, 613, 8 and 1486. (4 marks)
- (b) Multiply the sum of 87 and 349 by 7. (4 marks)
- (c) Take 2 yds. 2 ft. 10 ins. from the total of 1 yd. 1 ft. 8 ins. and 3 yds. 6 ins. (4 marks)
- (d) Subtract 17s. 5d. from £1 3s. 1d. and multiply the answer by 8. (4 marks)
- (e) Divide 17 yds. by 9 and give the answer in yds. ft. and ins. (4 marks)

2. (a) If butter costs 3s. 2d. a pound what is the cost of $\frac{3}{4}$ of a pound? (5 marks)
- (b) A train leaves London at 9.45 a.m. and reaches Newcastle at 2.16 p.m. It stops at York only for 20 minutes. For how long was the train travelling? (5 marks)
- (c) How much longer is 5 ins. than the sum of $2\frac{3}{4}$ ins. and $1\frac{1}{8}$ ins.? (5 marks)
- (d) Three quarters of the 36 children in a class drink a bottle of milk at school each day. If each bottle contains one third of a pint, how many pints of milk are consumed in 5 days? (5 marks)
- (e) A boy receives 1s. 9d. a week pocket money. How much is this in a year? (5 marks)

3. A shopkeeper bought 1 cwt. of apples for £5 10s. 0d. He sold 5 st. 6 lbs. of them at 1s. 6d. a lb. and the remainder at 1s. 2d. a lb. How much did he gain ? (10 marks)

4. At a school concert there were 18 rows of seats in the hall with 14 seats in each row. The seats in the first 5 rows could be reserved at 2s. 6d. each ; the remainder were unreserved at 1s. 6d. each

If $\frac{1}{10}$ of the reserved seats were unsold and 25 of the unreserved seats remained empty, what was the total amount of money taken at the concert ? (15 marks)

5. A runner starts at 2.30 p.m. and a cyclist at 2.40 p.m. on the same journey. The runner travels at 9 miles per hour and the cyclist at 15 miles per hour. When the cyclist arrives at their destination at 3.20 p.m., how far has the runner still to travel ? (15 marks)

6. A rectangular piece of cardboard is 2 ft. long and 1 ft. 6 ins. wide. A smaller rectangle is cut from this leaving a piece with an area of 412 sq. ins. If the length of the small rectangle cut off is 8 ins., what is (a) its width ; (b) its perimeter ? (15 marks)

ADMISSION TO GRAMMAR SCHOOLS, 1962.

FIRST EXAMINATION

ARITHMETIC — Guidance for Marking.

- (1) Any sums with the correct answers but obviously incorrect working, should receive no marks.
- (2) Acting on the guidance given, a Head Teacher should endeavour to get uniformity within the school in the allocation of marks for sums partly correct.
- (3) *It should be noted that in the marking guide, marks are awarded for processes mechanically correct, irrespective of any error in any previous process.*

Question No. 1	(a) No marks for incorrect answer.	
	(b) Correct addition	2 marks
	Correct multiplication	2 marks
	(c) Correct addition	2 marks
	Correct subtraction	2 marks
Question No. 2	(d) Correct subtraction	2 marks
	Correct multiplication	2 marks
	(e) No marks for incorrect answer.	
	(a) No marks for incorrect answer.	
	(b) Correct total time	3 marks
Question No. 3	Correct travelling time	2 marks
	(c) Correct addition	2 marks
	Correct subtraction	3 marks
	(d) No. of children	1 mark
	Total per day	2 marks
Question No. 4	Total per week	2 marks
	(e) No marks for incorrect answer.	
	(a) S.P. of apples at 1s. 6d.	3 marks
	(b) Weight of apples at 1s. 2d.	2 marks
	(c) S.P. of apples at 1s. 2d.	3 marks
Question No. 5	(d) Total S.P.	1 mark
	(e) Gain	1 mark
	(a) Number reserved	1 mark
	(b) Less $\frac{1}{10}$	2 marks
	(c) Money from reserved	4 marks
Question No. 6	(d) Number unreserved	2 marks
	(e) Less 25	1 mark
	(f) Money from unreserved	4 marks
	(g) Total takings	1 mark
	(a) Time of cyclist	2 marks
Question No. 5	(b) Length of journey	5 marks
	(c) Time of runner	2 marks
	(d) Distance covered by runner	5 marks
	(e) Distance still to travel	1 mark
	(a) Area of large rectangle	3 marks
Question No. 6	(b) Area of small rectangle	3 marks
	(c) Width of small rectangle	6 marks
	(d) Perimeter	3 marks