The University of the State of New York

221st HIGH SCHOOL EXAMINATION

ARITHMETIC

Tuesday, June 17, 1919—9.15 a. m. to 12.15 p. m., only

Write at top of first page of answer paper (a) name of school where you have studied, (b) grade of work completed in arithmetic.

The minimum requirement is the completion of the work of the seventh grade in arithmetic, as outlined in the 1910 syllabus for elementary schools.

Answer the first five questions and seven of the others. Reduce each result to its simplest form and mark each answer Ans. Questions 1, 2, 3, 4 and 5 are given as tests for accuracy; no credit, therefore, will be allowed unless the answer is correct.

1 Mental test on separate sheet.   [10]

2 Copy and add the following: [5]
234.15; 17.125; 19.5; 195.303; 59.007; 3.1; 41.009; 2005.9; 1.17; 222.01; 709.02; 1.1

3 Divide 38.54 by .164.   [5]

4 Prove that the result obtained in answer to question 3 is correct.   [5]

5 From the sum of $1\frac{1}{2}$, $3\frac{1}{4}$ and $5\frac{3}{4}$ take $4\frac{1}{2}$.   [5]

6 If a ton of coal costing $10.50 occupies 36 cubic feet, how much will it cost to fill a bin 12 feet long, 8 feet wide and 6 feet deep?   [10]

7 A farmer raised 250 bushels of oats and sold all but 65 bushels; what per cent of his crop did he sell?   [10]

8 An aviator went in an aeroplane to a height of 18,000 feet; how many feet over 3 miles did he go?   [10]

9 If a man should draw $3000 from a savings bank which pays 4% interest and should invest it in $4\frac{1}{4}$% Liberty Bonds at par, how much would he increase his income in six months by the change of investment?   [10]

10 How much will be due a wholesale dry goods merchant on a bill for $872, after discounts of $12\frac{1}{2}$% and 10% have been deducted?   [10]

11 If a family spent $\frac{1}{4}$ of their yearly income for rent, $\frac{1}{4}$ of it for food, $\frac{1}{4}$ of it for other expenses and saved $624, how much was their entire yearly income?   [10]

ARITHMETIC—*concluded*

12 A dealer sold an automobile and took in payment a note for $1500, without interest; he had the note discounted at a bank at 6% sixty days before maturity. How much did he receive from the bank?   [10]

13 The shorter side of a rectangular lot measures 5 rods and the diagonal 13 rods; how many rods does the longer side measure?   [10]

14 At 78 cents a square yard, how much will it cost to cover with cloth the top and the four sides of a box 3 feet long, 18 inches wide and 12 inches deep?   [10]

15 Find the area of a table top, circular in form, with a diameter of 7 feet.   [10]

ARITHMETIC MENTAL TEST

[Eight minutes allowed for this test]

Tuesday, June 17, 1919—9.15 a. m. to 12.15 p. m.

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Answer all parts of this test. Write each answer on the line marked Ans. No credit will be allowed unless the answer is correct.

a A boy bought marbles at the rate of 5 for 1 cent; how much did he pay for 100 marbles?   [2]

Ans. _____

b If cloth is bought for 75 cents a yard and sold at a profit of 20%, what is the selling price a yard? [2]

Ans. _____

c If a woman bought ⅘ of a yard of ribbon for 36 cents, what was the price a yard?   [2]

Ans. _____

d How many bushels of potatoes are there in 8 bags if each bag contains 2¾ bushels?   [2]

Ans. _____

e How many inches are there in ¾ of a yard?   [2]

Ans. _____