The University of the State of New York

260th High School Examination

ARITHMETIC

Monday, June 18, 1934 — 1.15 to 4.15 p. m., only

Fill in the following lines:

Name of school...Name of pupil...

Instructions

Do not open this sheet until the signal is given.

Answer all questions in part I and five questions from part II.

Part I is to be done first and the maximum time to be allowed for this part is one and one half hours. Merely write the answer to each question in the space at the right; no work need be shown.

If you finish part I before the signal to stop is given you may begin part II. However, it is advisable to look your work over carefully before proceeding to part II, since *no credit will be given any answer in part I which is not correct and reduced to its simplest form.*

When the signal to stop is given at the close of the one and one half hour period, work on part I must cease and this sheet of the question paper must be detached. The sheets will then be collected and you should continue with the remainder of the examination.

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Part I

Answer all questions in this part. Each question has 2 credits assigned to it; no partial credit will be allowed. Each answer must be reduced to its simplest form.

1 $2\frac{3}{8} - 1\frac{3}{4}$ 1..................Ans.

2 $1\frac{1}{2} \times 2 \times \frac{1}{3}$ 2..................Ans.

3 Divide $4\frac{1}{2}$ by $\frac{3}{8}$ 3..................Ans.

4 Add $1\frac{33}{40}$; $1\frac{1}{5}$; $2\frac{5}{8}$ 4..................Ans.

5 Find the sum of .764; 5.72; 38.46; 54.1; 1.702   5..................Ans.

6 What is the difference between 17.4601 and 6.0559?   6..................Ans.

7 $61.4628 \div .813$ 7..................Ans.

8 Find the value of x in the proportion $12:24::x:6$ 8..................Ans.

9 Write in figures: thirty-four thousand three hundred seventeen and twenty-seven thousandths.   9..................Ans.

10 What fractional part of a dollar is $62\frac{1}{2}$ cents?   10..................Ans.

11 How much change should I receive from a five-dollar bill if I buy a hat for $1.35 and a pair of gloves for $1.50?   11..................Ans.

12 One side of a square is 24 inches; find the perimeter of the square.   12..................Ans.

13 What per cent of 24 is 8?   13..................Ans.

14 Express one half of 1% as a decimal.   14..................Ans.

15 Multiply 4.56 by 8.9   15..................Ans.

16 Find the number of square feet in a floor 20 feet by 18 feet.   16..................Ans.

17 At the rate of 4 grapefruit for 25 cents, how much will a dozen grapefruit cost?   17..................Ans.

18 At 50 cents an hour, how much will a man earn in 5 days if he works 7 hours a day?   18..................Ans.

19 What will 300 pounds of salt cost at $15 a ton?   19..................Ans

20 What will 12 ounces of tea cost at 40 cents a pound?   20..................Ans.

21 A piece of furniture listed at $40 is sold at a discount of 20%; what is the selling price?   21..................Ans.

22 What is the interest on $300 for one year at $3\frac{1}{2}$%?   22..................Ans.

23 To which of the following is $33\frac{1}{3}$% equal: $.033\frac{1}{3}$; $1.3\frac{1}{3}$; $\frac{1}{3}$?   23..................Ans.

24 Henry wrote 20 words in a spelling lesson and received a mark of 90%; how many words did he write correctly?   24..................Ans.

25 Write in words the number .0008.   25..................Ans.

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Write at top of first page of answer paper to part II (*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 first half of the eighth grade in arithmetic.

Part II

Answer any five questions from this part. No credit will be allowed unless all necessary operations are given. Reduce each result to its simplest form and mark each answer Ans.

26 The Junior Red Cross held an entertainment for their fund. It was held in the school auditorium, which seats 600 people. One third of the seats were sold for 75 cents each, one half of them for 50 cents each and the remainder for 25 cents each. The expenses were $24.75 for printing, $46.80 for costumes, $30 for scenery and $25 for other expenses. How much money was made for the Red Cross? [10]

27 The list price of a radio is $160. Find the net price if the radio is sold with discounts of 15% and 10%. [10]

28 An apple grower sold his apples through a commission merchant in New York City. The shipment, which amounted to 550 bushels, was sold at $2.10 a bushel. The rate of commission was 4%. The cost of freight and cartage was $185. How much did the farmer receive after all expenses were paid? [10]

29 A rural school district has an assessed valuation of $45,000. The district wishes to raise $202.50 by tax. What will be the tax rate [5]? How much school tax will a farmer in this district pay whose property is assessed at $2700 [5]?

30 A building valued at $24,000 was insured for ⅔ of its value. The premium was $6.75 per thousand for a term of three years. What was the cost per year? [10]

31 Mr Thompson's car averages 14.5 miles per gallon of gasoline. At 18 cents a gallon, how much did it cost him for gasoline in a year in which he drove his car 15,544 miles? [10]

32 How much profit is made on 1200 postcards bought at $1.50 a hundred and sold at the rate of 2 for 5 cents? [10]

33 A man bought a lot for $800 and built a house on it costing $4200. He pays $150 a year in taxes and $100 a year for repairs. He rents the house for $50 a month. What per cent does he receive on his investment? [10]

34 A man earns $100 a month. Each month he spends $25 for rent, $8 for fuel, light and insurance, $25 for food, $15 for clothing and $17 for other expenses. He saves the remainder.

  a What are his total expenses each month? [3]

  b How much does he save each month? [3]

  c What per cent of his salary does he save? [4]