

The University of the State of New York

262D HIGH SCHOOL EXAMINATION

ARITHMETIC

Monday, January 21, 1935 — 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.

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|---|-------------|
| 1 Add \$45.05; \$16.77; \$3.88; \$.95; \$51.64 | 1.....Ans. |
| 2 Find the sum of $5\frac{1}{2}$; $4\frac{1}{2}$; $1\frac{1}{2}$ | 2.....Ans. |
| 3 $7\frac{1}{2} - 4\frac{1}{2}$ | 3.....Ans. |
| 4 Find the product of $3\frac{1}{2}$ and $3\frac{1}{2}$ | 4.....Ans. |
| 5 Divide $7\frac{1}{2}$ by $1\frac{1}{2}$ | 5.....Ans. |
| 6 Divide 84.24 by 2.4 | 6.....Ans. |
| 7 $870.6 \times .37$ | 7.....Ans. |
| 8 Change 80% to a fraction. | 8.....Ans. |
| 9 Change $\frac{2}{3}$ to a decimal. | 9.....Ans. |
| 10 How many tons are there in 6000 pounds? | 10.....Ans. |
| 11 What per cent of 40 is 30? | 11.....Ans. |
| 12 What fraction of a pound is 10 ounces? | 12.....Ans. |
| 13 If the radius of a circle is $1\frac{1}{2}$ inches, how long is the diameter? | 13.....Ans. |
| 14 To the product of 7 and 9 add the sum of 7 and 9. | 14.....Ans. |
| 15 What is the interest on \$500 for 3 months at 6%? | 15.....Ans. |
| 16 Find the value of x in the proportion $x:72::16:9$ | 16.....Ans. |
| 17 Write in figures: three hundred twenty-five and forty-five thousandths. | 17.....Ans. |
| 18 Is 195 most nearly equal to $\frac{1}{2}$ of 600 or $\frac{1}{3}$ of 600 or $\frac{1}{4}$ of 600? | 18.....Ans. |
| 19 Is $37\frac{1}{2}\%$ equal to 37.5 or .375 or $\frac{3}{8}$? | 19.....Ans. |
| 20 What will 2 pounds of sugar cost if 10 pounds cost 60 cents? | 20.....Ans. |
| 21 A book listed at \$1.25 is sold at a discount of 20%; what is the selling price? | 21.....Ans. |
| 22 Mary bought $2\frac{1}{2}$ yards of ribbon at 32 cents a yard. How much change should she receive from one dollar? | 22.....Ans. |
| 23 James gained an average of $7\frac{1}{2}$ pounds a year. What was his total gain in weight in 4 years? | 23.....Ans. |
| 24 How many badges $3\frac{1}{2}$ inches long can be cut from 7 yards of ribbon? | 24.....Ans. |
| 25 At the rate of three for a quarter what will a dozen melons cost? | 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 A boy's marks in arithmetic for the last five weeks of the term were as follows: 85, 90, 75, 95, 85. Construct a line or bar graph to show these facts. [10]

27 Copy on your answer paper the expressions in column A and after each write the word or expression in column B that relates to it. [10]

Column A	Column B
A four-sided figure	premium
The fee paid for insurance	9
Deduction in the amount of a bill	rectangle
Money paid for use of money	$\frac{1.8}{5}$
Money paid to an agent for selling property or goods	$\frac{1}{3}$
The answer in addition	$1\frac{2}{3}$
A mixed number	interest
An improper fraction	commission
The square root of 81	discount
The ratio of 1 foot to a yard	sum

28 On February 1, a merchant had a balance of \$375.80 in the bank. During the next week he deposited checks and money as follows: \$22.30, \$48.00, \$12.60, \$18.55, \$43.74. During that same week he drew out checks as follows: \$25.80, \$19.56, \$76.75, \$123.00, \$49.30. What was his balance left in the bank? [10]

29 James Hall receives a salary of \$18 a week as a clerk in a store. He also gets a commission of 3% on his weekly sales exceeding \$300. Mr Hall's sales amounted to \$450 one week. How much did he earn that week? [10]

30 A quart of milk will furnish a lunch for 4 first-grade pupils. There are 32 pupils in the first grade. At 10 cents a quart, how much will it cost to provide milk for these children for one school week of 5 days? [10]

31 My property cost me \$8000. It is assessed at 65% of its cost. My taxes this year are \$130. What is the rate per thousand of assessed valuation? [10]

32 A potato grower sold 1200 bushels of potatoes through his agent in New York City. The selling price was 80 cents a bushel. The rate of commission was $3\frac{1}{2}\%$. The cost of freight and cartage was \$124.50. Find the amount received by the potato grower after all expenses were paid. [10]

33 Suppose that on February 1, 1933, you bought from A. B. Jones merchandise amounting to \$1950. Mr Jones agreed that if you would pay \$1000 at once, he would take your note at 5% on the balance to be paid at the end of six months. What was the amount due Mr Jones at the end of the six months? [10]

34 A case of cereal costs \$2.40 delivered. It contains 20 packages, which retail at 15 cents a package. What is the profit on the case and what is the per cent of profit based on the cost? [10]