# The University of the State of New York

257TH HIGH SCHOOL EXAMINATION

## ARITHMETIC

Monday, June 19, 1933 - 1.15 to 4.15 p. m., only

## Fill in the following lines:

| Name of se | 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.



## ARITHMETIC

Monday, June 19, 1933

### Part I

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

| should be allowed. Each answer must be reduced to its simplest form.   |    |      |
|--|----|------|
| 181-51   | 1  | Auc  |
| 2 Add 7.145; 36.05; 471.5; .368; 5.1   | 2  |      |
| 3 Write 12½% as a decimal.   | 3  |      |
| 4 Divide 58.729 by 28.1  | 4  |      |
| 5 4\frac{1}{2} \times 1\frac{3}{2}   | 5  |      |
| 6 At 45¢ an hour, how many hours will it take to earn \$9?   | 6  |      |
| 7 The captain of the school baseball team bought a glove that was marked \$4.50. He received a discount of 10%. What did he pay? | 7  |      |
| 8 What is the result of dividing 9\frac{1}{3} by 1\frac{1}{6}?   | 8  |      |
| 9 Find the product of 2.74 and 5.9   | 9  |      |
| 10 A family that has an income of \$150 a month spends \$30 a month for rent; what per cent of the income is spent for rent?     | 10 | Ans. |
| 11 Find the sum of 4½; 3¾; 1½  | 11 | Ans. |
| 12 The rectangular surface of a table top measures 6 feet by $3\frac{1}{2}$ feet; find its area.                                 | 12 | Ans. |
| 13 What is the cost of a pound and four ounces of butter at 28 cents a pound?  | 13 | Ans. |
| 14 How many rods of fence will be needed to fence a rectangular field 60 rods long and 45 rods wide?                             | 14 | Ans. |
| 15 What is the cost of a dozen and a half eggs at 32 cents a dozen?  | 15 | Ans. |
| 16 Milk is sold for 5 cents a glass. There are two glasses in a pint. What will a quart of milk bring when sold by the glass?    | 16 | Ans. |
| 17 A house cost \$4000 and the furniture ½ as much; how much did both cost?  | 17 | Ans. |
| 18 Find the value of $x$ in the proportion $x$ : 24 :: 12 : 72   | 18 | Ans. |
| 19 What is the interest on \$400 for 3 months at 6%?   | 19 | Ans. |
| 20 Write in figures: fourteen and eight hundred five thousandths.  | 20 | Ans. |
| 21 Add \$81.40; \$27.75; \$56.15; \$17.00; \$1.75  | 21 | Ans. |
| 22 What is the product when a number is multiplied by zero?  | 22 | Ans. |
| 23 What will 15 pencils cost at the rate of 3 for 5 cents?   | 23 | Ans. |
| 24 What is the difference between 18.06 and 1.475?   | 24 |      |
| 25 What is the square root of 1600?  | 25 | Ans. |

## ARITHMETIC

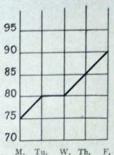
## Monday, June 19, 1933

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 This chart shows Robert King's standings in arithmetic for one week. Find his average standing for that week. [10]



27 Make out a receipted bill for the following: [10]

On June 8, 1932, John Hall bought of the Northern Supply Company, Buffalo, New York, 2 tires at \$11.75 each; 6 auto lamp bulbs at 12¢ apiece; 4 brake bands at 90¢ apiece; 2 hammers at \$1.18 each.

28 An automobile valued at \$950 was insured against fire, collision and theft. The rate for fire was 2%, for collision 4% and for theft 32%. Find the total amount of the premium paid for insuring the automobile. [10]

29 The school tax in a district of which the assessed valuation was \$2,555,000 was \$25,550.

a What was the school tax rate per thousand? [5]

b What amount of tax did a man pay whose property was assessed at \$3950? [5]

30 Mr Jones employed a real-estate salesman to buy three pieces of property for him. For the first piece he paid \$7200, for the second \$6500 and for the third \$5500. The agent's commission was 2% of the purchase price. Find the total amount, including the commission, paid by Mr Jones for the three pieces of property. [10]

31 Copy the expressions in column I and after each write the word or number selected from column II that matches it. [10]

| Column I The answer in addition       | Column II<br>bisect |
|---------------------------------------|---------------------|
| Base × rate                           | quotient            |
| Divide a line into two equal parts    | 169                 |
| A right angle                         | percentage          |
| A decimal                             | premium             |
| Money paid for insurance              | check               |
| The square of 13                      | .49                 |
| The answer in division                | sum                 |
| The distance around a rectangular lot | 90°                 |
| An order on a bank to pay money       | perimeter           |
|                                       | [3]                 |

- 32 A man now pays \$50 a month rent for a house. How much would he save or lose a year if he were to buy the house for \$6500 with money borrowed at 6% interest and if, in addition, the taxes, insurance and repairs amount to \$167.25 a year? [10]
- 33 A cellar for a new building is to be 60 feet long, 26 feet wide and 9 feet deep. What will the excavation cost at \$1.25 a cubic yard? [10]
- 34 Schools are given a discount of 10% on all goods purchased from the R. J. Murphy Company. They are also allowed a second discount of 2% if the bill is paid within 10 days. A school buys from this company 5 dozen baseballs listed at \$15 a dozen. If the bill is paid within 10 days, what is the net cost? [10]



