

The University of the State of New York

248TH HIGH SCHOOL EXAMINATION

ARITHMETIC

Tuesday, June 17, 1930—9.15 a. m. to 12.15 p. m., only

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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.

# ARITHMETIC

Tuesday, June 17, 1930

## 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.*

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|---|-------------|
| 1 Find the cost of 3500 envelopes at \$7.75 a thousand.   | 1.....Ans.  |
| 2 A battleship costs \$30,000,000. If this amount was placed at $4\frac{1}{2}\%$ simple interest, what would be the annual income?                      | 2.....Ans.  |
| 3 Find the cost of 26 quarts of cream at \$1.10 a gallon.   | 3.....Ans.  |
| 4 James earned \$1.80 a day and saved 40% of it. If he worked 30 days during the summer vacation, how much did he save?                                 | 4.....Ans.  |
| 5 A 16-pound turkey weighed 12 pounds after it was roasted; find the per cent of loss in weight.  | 5.....Ans.  |
| 6 If there are 320 pupils in a class and $\frac{7}{8}$ were promoted, how many failed?  | 6.....Ans.  |
| 7 How many pieces, each $\frac{3}{4}$ of an inch long, can be made from a bar of iron 1 foot long?  | 7.....Ans.  |
| 8 What is the cost of painting a kitchen floor that is 15 feet long and 12 feet wide at 35¢ a square yard?  | 8.....Ans.  |
| 9 Find the area of a triangular flower bed whose base is 8 feet and whose altitude is $6\frac{1}{2}$ feet.  | 9.....Ans.  |
| 10 What is the selling price of a bathing suit that is marked \$8.50 and sold at 15% discount?  | 10.....Ans. |
| 11 If Jack's scores on five arithmetic tests were 67, 72, 80, 91 and 85, what was his average score?  | 11.....Ans. |
| 12 If it costs $8\frac{1}{4}$ ¢ a mile to operate a car, what would a 1480-mile trip cost?  | 12.....Ans. |
| 13 On a road map the distance from Albany to New York, 150 miles, measures $6\frac{1}{4}$ inches; how many miles are represented by 1 inch on this map? | 13.....Ans. |
| 14 Find the difference between 87 and 5.089   | 14.....Ans. |
| 15 Add \$96.79; \$42.04; \$7.98; \$14; \$31.60  | 15.....Ans. |
| 16 Add $72\frac{5}{8}$ ; $26\frac{3}{4}$ ; 185; $379\frac{1}{2}$  | 16.....Ans. |
| 17 Add 7 ft 3 in.; 8 ft 6 in.; 9 ft 8 in.; 2 ft 3 in.; 3 ft 5 in.   | 17.....Ans. |
| 18 $3\frac{3}{4} - 2\frac{1}{8}$  | 18.....Ans. |
| 19 Multiply 827 by 64 and from the product subtract 10724.  | 19.....Ans. |
| 20 $2.25 \times 3\frac{1}{2}$   | 20.....Ans. |
| 21 $5\frac{3}{8} \times 6\frac{3}{8}$   | 21.....Ans. |
| 22 Multiply 56.019 by 2.93  | 22.....Ans. |
| 23 Divide 6.273 by 1.23   | 23.....Ans. |
| 24 $7\frac{1}{2} \div 1\frac{1}{8}$   | 24.....Ans. |
| 25 $8 : x = 12 : 168$ ; find $x$ .  | 25.....Ans. |

# ARITHMETIC

Tuesday, June 17, 1930

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 Mr Camp rents a house to Mr Eddy for \$75 a month. Mr Camp pays \$165 for taxes, \$30 for insurance and repairs and \$130 for paving assessment. How much was his net income from the property for that year? [10]

27 A Girl Scout has saved \$50 and plans to go to a summer camp for a three weeks' vacation. Board is \$8 a week, laundry 50 cents a week, railroad fare to camp and return \$3.30, extras \$1 a week.

a What would be the expense for a three weeks' stay at the camp? [8]

b How much money would the girl have left? [2]

28 A grocer bought 81 bushels of potatoes at \$1.15 a bushel and sold  $\frac{3}{4}$  of them at \$.45 a peck and the remainder at \$.40 a peck. What was his profit? [10]

29 A man owns a house worth \$6000, which is assessed for 75% of its value. What is his tax at \$26.74 per \$1000 of assessed valuation? [10]

30 A family with an income of \$2500 a year allowed  $\frac{1}{3}$  of the income for rent, 25% for food, 15% for clothing, \$150 for recreation, 20% for other expenses and the rest for savings. How much money was saved? [10]

31 Find the interest at 6% on \$1970 borrowed April 9, 1928, and due July 15, 1930. [10]

32 What will it cost a man to drive a car 400 miles if his car averages 15 miles to the gallon of gasoline and 100 miles to the quart of oil? Gasoline costs 18.5¢ a gallon and oil 30¢ a quart. [10]

33 Some Boy Scouts desire to undertake a reforestation project. They find that by setting the trees 6 feet apart each way they need approximately 1200 trees an acre. They wish to set out 7800 trees. Land costs \$5 an acre. Trees cost \$4 a thousand and the expressage is 30¢ a thousand.

a Find the cost of the land needed for the trees. [5]

b Find the cost of the trees. [2]

c Find the express charges. [2]

d What is the total cost of the project? [1]