The University of the State of New York

217TH HIGH SCHOOL EXAMINATION

ARITHMETIC

Tuesday, June 19, 1917—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

$38.75
3.47
69.36
284.19
.82
15.03
7.90
.25
46.00
178.43
——— [5]

3 From the sum of $18\frac{3}{4}$ and 12.5 subtract the sum of $7\frac{3}{8}$ and $3.87\frac{1}{2}$. [5]

4 Divide 22.464 by 1.44. [5]

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

6 The standard bushel measure of the United States is in the form of a cylinder $18\frac{1}{2}$ inches in diameter and 8 inches deep; how many cubic inches does it contain? [10]

7 A man holding a note, without interest, for $360 has it discounted at 6% at a bank 30 days before maturity; how much should the bank pay him? [10]

8 If a tank 12 feet long and 7 feet wide contains 1890 gallons of water, what is the depth of the water? [1 cubic foot $=7\frac{1}{2}$ gallons] [10]

9 A commission merchant sold for a farmer 350 bushels of potatoes at $3.75 a bushel. The rate of commission was 5%. The freight and other charges amounted to $35. How much per bushel did the farmer receive? [10]

10 Make out a receipted bill such as John Smith, a tailor, might send to Mary L. Brooks for the following: 7 yards serge @ $1.50; 4 yards satin @ $1; $1\frac{1}{2}$ yards canvas @ 20¢; $\frac{1}{2}$ yard wadding @ 16¢; $\frac{1}{2}$ dozen buttons @ $1 a dozen; making suit $15. [10]

11 What sum of money must a man invest at $5\frac{1}{4}$% to secure an annual income of $2100? [10]

12 A sidewalk 138 feet long and 5 feet wide was laid in front of a building lot; the price was 14¢ a square foot. If the city paid 60% of the expense and the owner of the lot paid the remainder, how much did the walk cost the owner? [10]

13 The assessed valuation of the property of a town is $1,875,000; if the total tax to be raised is $7500, how much will a property owner whose assessment is $1300 be required to pay? [10]

14 A pupil's report card shows the following standings:

Arithmetic	85	Spelling	100
Geography	80	English	75
Physiology	70	History	95

Find correct to *one* decimal place the pupil's average standing. [10]

15 If 14 barrels of flour last 9 weeks, how many weeks will 24 barrels last? [10]

ARITHMETIC MENTAL TEST

[Eight minutes allowed for this test]

Tuesday, June 19, 1917—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 If a man is paid $3.20 for 8 hours' work, at the same rate how much should he receive for 11 hours' work? [2]

Ans. _____

b When flour is selling for $12.60 a barrel, what part of a barrel of flour can be bought for $3.15? [2]

Ans. _____

c If 5 men can paint a bridge in 10 days, how long will it take 10 men to do the work? [2]

Ans. _____

d How many rods of fence will be required to inclose a field 60 rods long and 50 rods wide? [2]

Ans. _____

e How many quart bottles are needed to hold 31½ gallons? [2]

Ans. _____