216TH HIGH SCHOOL EXAMINATION

ARITHMETIC

Tuesday, January 23, 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 Add

$18.76
4.95
23.64
45.31
.75
6.78
89.54
68.73
9.78
14.24

[5]

3 Divide 186.375 by 497. [5]

4 From $18\frac{5}{16}$ subtract $6\frac{1}{4}$. [5]

5 Multiply 496 by $37\frac{7}{8}$. [5]

6 A manufacturer employs 57 men at $2.25 per day each and 19 men at $2.75 per day each; what is the amount of his pay roll for a month of 26 working days? [10]

7 A telephone connects two farmhouses $\frac{7}{8}$ of a mile apart; at 3¢ a foot, what is the cost of a single line of wire? [10]

8 Find the amount due on the following laundry bill: 4 shirts @ $12\frac{1}{2}$¢, 6 collars @ $2\frac{1}{2}$¢, 3 pairs of cuffs @ 5¢ a pair, 9 handkerchiefs at the rate of 3 for 10¢ and 3 pairs of socks @ 5¢ a pair. [10]

9 A rectangular plot containing an acre of land has a frontage of 132 feet on the street; how deep is it? [10]

10 In 1915 the assessed valuation of a piece of property was $3600; in 1916 the assessed valuation was increased 25%. If the tax rate in 1916 was $2.89 on every $100, what was the amount of the tax paid on the property? [10]

11 By selling woolen blankets for $2.56 above cost a dealer gained 32%; what did they cost? [10]

12 Find the interest on $480 for 69 days at 5%. [10]

13 From 30 yards of canvas three pieces are cut; the first piece is $8\frac{3}{4}$ yards long, the second $5\frac{1}{8}$ yards long and the third $12\frac{7}{8}$ yards long. Find the length of the canvas left. [10]

14 If there are 8.1 pounds of butter fat in 225 pounds of milk, how many pounds of milk will be required to produce 27 pounds of butter fat? [Solve by proportion.] [10]

15 A flower garden in the form of a circle has a diameter of 14 feet; what is its area? [10]

ARITHMETIC MENTAL TEST

[**Eight** minutes allowed for this test]

Tuesday, January 23, 1917—9.15 a. m. to 12.15 p. m.

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 Find the cost of 1½ bushels of pears at 40 cents a peck. [2]

Ans. _____

b If an automobile travels at the rate of 20 miles an hour, how far will it travel in one minute? [2]

Ans. _____

c What fractional part of 3 yards is ¾ of a yard? [2]

Ans. _____

d What is the interest on $50 for 3 months at 4%? [2]

Ans. _____

e How many 4 ounce packages of nails can be made from 25 pounds? [2]

Ans. _____