220TH HIGH SCHOOL EXAMINATION

ARITHMETIC

Tuesday, January 21, 1919—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 the following: [5]
35.125; 201.3; 1716.04; 256.325; 19.1; 2920.25; 7.5; .36; 1.001.

3 If 2½ acres of land cost $185, what will be the cost of 1¾ acres at the same rate? [5]

4 Multiply the difference between .1 and .01 by 2¾. [5]

5 Divide 6⅕ by 4⅝. Give the answer as a mixed number. [5]

6 A pound of yarn is worth $5; what will be the cost of yarn for 150 pairs of socks, if 4 ounces of yarn are used for each pair? [10]

7 How many $1000 Liberty Bonds bearing interest at 4¼% must a man buy to receive $850 in yearly interest?[10]

8 During the week of Dec. 9, 1918, the children of the grammar schools of a certain city invested $6168.50 in Thrift Stamps; during the week of Dec. 16, 1918, they invested an amount equal to 120% of the amount invested during the week of Dec. 9. How much did they invest during both weeks? [10]

9 A note for $100, which does not bear interest, is discounted at 6% sixty days before it is due; how many tons of coal at $9 a ton can be bought with the proceeds? [10]

10 A drover invests $3000 in sheep at $6 per head; if 20% of the sheep die, at what price per head must he sell the remainder to make 33⅓% on the transaction? [10]

11 Buffalo is 440 miles from New York; if an automobile uses a gallon of gasoline every 11 miles, what will it cost for gasoline to go by automobile from Buffalo to New York and return, the price of gasoline being 28 cents a gallon? [10]

12 The base of a right triangle is 40 feet and the altitude is 30 feet; how much shorter is the hypotenuse than the sum of the base and altitude? [10]

13 On goods listed at $800, which is the better for the buyer and how much, successive discounts of 25% and 10% *or* a single discount of 35%? [10]

14 On Jan. 7, 1919, the Snowdon Products Co. of St Louis, Mo., sold to Charles Price the following products: 5 quarts of milk at 14 cents a quart; 4 pounds of butter at 67 cents a pound; 3½ dozen of eggs at 72 cents a dozen. Make out the receipted bill. [10]

ARITHMETIC MENTAL TEST

[Eight minutes allowed for this test]

Tuesday, January 21, 1919—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 John has 27 cents, James has 43 cents and William has as much as both John and James; how much have all three together?   [2]

Ans. _____

b At 64 cents a dozen, what will 3 eggs cost?   [2]

Ans. _____

c The price of milk is raised from 10 cents a quart to 13 cents a quart; what is the increase per cent? [2]

Ans. _____

d A man bought 2 pounds of coffee and gave the store-keeper $1; if he received 30 cents in change, what was the price of the coffee a pound?   [2]

Ans. _____

e A rectangular field is 20 rods long and 10 rods wide; at $3 a rod, how much will it cost to fence the field?   [2]

Ans. _____