

ARITHMETIC

Tuesday, June 18, 1918—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 four questions and seven of the others. Reduce each result to its simplest form and mark each answer Ans.

Questions 1, 2, 3 and 4 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: [10]

43.125; 673.24; 87.9; 538.375; 79.63; 2691.425; 9843.667; 10.875; 382.333; 77.25

3 In an example in multiplication, the product was 38,412 and the multiplicand was 792; what was the multiplier? [5]

4 $8.5 + \frac{1}{4} - 2\frac{1}{2} + .25 = ?$ [5]

5 A boy bought an overcoat for \$13.75, a suit of clothes for \$21 and a pair of shoes for \$4; he paid for them in work at \$1.25 a day. How many days did he work? [10]

6 Suppose that an average family wastes a slice of bread every day and that there are 20 slices in a 12 ounce loaf. If a soldier's ration of bread is 10 ounces a day, how many day's rations are wasted weekly in a village containing 500 families? [10]

7 One end of a ladder 39 feet in length was placed against the wall of a building; the other end rested on the ground 15 feet from the foot of the wall. How high on the wall did the ladder reach? [10]

8 At 90 cents a square yard, what would be the cost of constructing $2\frac{1}{2}$ miles of state road 24 feet wide? [10]

9 If a sheet of postage stamps contains 100 stamps, what is the total value of 75 sheets of 1 cent stamps, 60 sheets of 2 cent stamps, 45 sheets of 3 cent stamps and 25 sheets of 5 cent stamps? [10]

10 From February 18 to March 16, the 165 pupils in a public school in the village of Edison, Ohio, sold \$11,296.25

worth of thrift stamps. Four pupils sold stamps valued as follows: \$2892; \$2717.50; \$1973; \$1547.75. State (a) the total number of 25 cent stamps sold [2], (b) the average number of 25 cent stamps sold by each pupil in the school [4], (c) the total number of 25 cent stamps sold by the four pupils [4].

11 If a \$500 Liberty Bond bearing $4\frac{1}{4}\%$ interest and purchased at par should be held for 10 years, how much interest on the bond would the owner receive during that time? [10]

12 A dealer offers a piano at \$450, with discounts of 10% and 5% or a single discount of 14%; which is the better offer and how much? [10]

13 A 90 day note for \$750, dated April 20, 1918, was discounted May 14, 1918, at 6%; find the proceeds. [10]

14 On June 5, 1918, Henry Palmer bought of Edward Richards & Co., Baltimore, Md., the following goods; $6\frac{1}{2}$ yards silk at \$4.20 a yard; $3\frac{1}{2}$ yards broadcloth at \$3.80 a yard; 8 yards silk ribbon at 65¢ a yard; 16 yards silk braid at $12\frac{1}{2}\%$ a yard. Make out the receipted bill. [10]

ARITHMETIC MENTAL TEST

[Eight minutes allowed for this test]

Tuesday, June 18, 1918—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 At 36 cents a hundred pounds, what will be the express charges on a package weighing 125 pounds? [2]

Ans. _____

b What will be the cost of 1000 yards of wire at 1 cent a foot? [2]

Ans. _____

c How many inches are there in $\frac{3}{4}$ of a yard? [2]

Ans. _____

d If a pencil that costs 3 cents is sold for 4 cents, what is the gain per cent? [2]

Ans. _____

e What will be the total cost of a railway ticket if the regular fare is \$2 and the war tax is 8% of the regular fare? [2]

Ans. _____