189TH HIGH SCHOOL EXAMINATION

ARITHMETIC

Tuesday, June 12, 1906—9.15 a. m. to 12.15 p. m., only

Answer the first five questions and five of the others. Give all operations (except mental ones) necessary to find results. Reduce each result to its simplest form and mark it Ans. Each complete answer will receive 10 credits. Papers entitled to less than 75 credits will not be accepted.

1 Define *five* of the following: number, minuend, least common multiple, interest, bank discount, power, metric system.

2 Simplify $\frac{(\frac{7}{8}+\frac{1}{8}\times 1\frac{1}{2})\div(6\times\frac{1}{4})}{1\frac{5}{16}}$

3 What is the cost of 20 joists 4″×2″ and 12′ long and 24 boards 1½″ thick, 8″ wide and 10′ long @ $18 per M?

4 A watch was sold for $228 at a loss of 5%; how much would have been gained by selling it at a gain of 5%?

5 Find the simple interest, at 5½%, on a note for $500 given October 22, 1904 and paid June 7, 1906.

6 A man has ⅛ of his property invested in a farm, ⅛ in railroad stock and the remainder, which is $1500, deposited in a bank; find the value of his farm and of his railroad stock.

7 What will it cost to carpet, in the most economical way, a room 10′×11′, with carpet ¾ yard wide, @ $1.25 a yard?

8 A tank is 5.4 decimeters wide, 2.5 decimeters deep and 1.75 meters long; find the weight, in kilograms, of the water it can hold.

9 How many rods of fence will be required to inclose a square field containing $2\frac{1}{4}$ acres?

10 An agent bought 240 baskets of peaches @ 75¢ a basket, charging 3½% commission; find the total cost of the purchase to the principal.

11 A man pays $105 once in 3 years for insuring his house at ½% annually; find the amount for which the house is insured.

12 What per cent is realized from an investment in 4½% stock at 124⅔, brokerage ⅛%?