188th High School Examination

ARITHMETIC

Thursday, January 25, 1906—9.15 a. m. to 12.15 p. m., only

Answer the first five questions and five of the others but no more. 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 75 or more credits will be accepted.

1 Write in Arabic notation (a) five hundred two and four thousandths, (b) one hundred sixty-thirds. Write in Roman notation 1949. Write in words 4044.0109.

2 Reduce 64 rd. 4 yd. 1 ft. to a decimal of a mile, correct to *three* decimal places.

3 Find the simple interest of $532 from Sep. 28, 1905 to Jan. 10, 1906 at 4½%.

4 A box of 150 oranges is bought for $1.40; the oranges are sold at 20 cents per dozen; find the gain per cent.

5 Factor 102, 68 and 136. From these factors determine (a) the greatest common divisor, (b) the least common multiple.

6 A cistern 2.5 m. by 3.6 m. contains 14 kiloliters of water; how deep is the water?

7 At $2.25 per yd., find the cost of carpeting a room 24' by 30', with carpet ¾ yd. wide, if the breadths run lengthwise and 9 yd. are allowed for matching.

8 In a certain school district assessed at $80,000 a tax of $1200 is raised; Mr B's assessed valuation is $6840. Find the rate of taxation and Mr B's tax.

9 A six months note for $600 without interest, dated Dec. 4, 1905, is discounted at a bank Dec. 29 at 6%; find the discount and the proceeds.

10 At $22 per M, find the cost of 20 joists, each 4"×6" and 16' long.

11 A man paid $2550 for 5% railway stock at 127⅞, brokerage ⅛%; how many shares did he buy? What was his annual income?

12 The diagonal of a square is 20 ft.; find to *two* decimal places the length of one side.