- 158. What is the least common multiple (or dividend) of the nine digits?
  - 159. Divide 0.01764144 by 0.0018.
- 160. Reduce 7 fur. 29 rd. to the decimal of a mile.
- 161. What sum, at 7 per cent., will amount to \$221.075 in 3 years 4 months?
- 162. What is the amount of \$1,200 for 2 years at 6 per cent. compound interest, payable quarterly?
- 163. If \$100 gain \$6 in 1 year, what principal will gain \$12 in 8 months?
- 164. To what number has  $\frac{1}{2}$  the same ratio as exists between 3 and 21?
- 165. What number of men will be required to perform a piece of work in 8 days, that would take 15 men 24 days?
- 166. A. and B. enter into partnership. A. furnishes \$240 for 8 months; and B. \$560 for 5 months. They lost \$118. How much did each man lose?
  - 167. What is the square root of 61723020.96?
- 168. How many cubic quarter-inches are contained in a cubic inch?

## Examination VIII. Feb. 19, 1869.

- 169. Add the following numbers: One hundred and eight billions, three hundred and six; twenty-one billions, twenty thousands, two hundred and ten; thirty billions, twenty-nine millions and three.
- 170. Reduce 2,579,792 drams avoirdupois to higher denominations.
  - 171. Reduce 1 mi. 18 rd. 2 yd. 2 ft. to inches.

- 172. Multiply  $\frac{2}{3}$  of  $\frac{12}{7}$  by  $3\frac{1}{2} \div 16$ .
- 173. Divide  $\frac{3}{12}$  of  $\frac{18}{21}$  by  $\frac{6}{7}$ .
- 174. Find the least common multiple of all the even numbers from 1 to 15.
  - 175. From the sum of \(^2\) and \(^4\) take \(^5\).
  - 176. Add together  $\frac{1}{4033}$  hhd. and  $\frac{2}{7}$  gill.
- 177. Multiply 30.6002 by two and one ten-thousandth.
  - 178. Divide 4.08 by .000136.
  - 179. Reduce \$78 to a decimal.
- 180. Reduce 8 oz. 5 pwt. 3 gr. to the decimal of a fb.
- 181. If 21 men in 12 days can do certain work, how many men in 7 days could do 3 as much?
- 182. How much will it cost to dig a cellar 40 ft. long, 32 ft. wide, and 5 ft. deep, at \$0.25 a cubic yard?
- 183. A. begins business with \$500; at the end of 2 months B. puts in \$300; at the end of 1 month more C. puts in \$600; at the end of 5 months more, the profits amount to \$1,056. What was each man's share?
  - 184. 3 pence is what per cent. of 4 shillings?
- 185. What sum in 1 year will yield \$48.75 at 121 per cent?
- 186. What is the bank discount on a note for \$600 for 2 months and 9 days, at 10 per cent. per annum?
- 187. I sell goods for \$511.29, and gain  $9\frac{1}{4}$  per cent.; what did the goods cost me?
- 188. At what rate will \$500 yield \$34 interest in 1 year 1 month and 18 days?

189. What is the compound interest of \$200 for 3 years at 7 per cent?

190. How much gold will \$100 currency buy, gold being at 147?

191. What is the square root of 403.6081?

192. What is the cube root of  $\frac{1061208}{64000}$ ?

## Examination IX. June 11, 1869.

193. The factors of a number are three hundred ninety-seven thousand five hundred, and nine thousand eight hundred. What is the product expressed in words?

194. If one man can mow 1.875 acres in a day, how many acres can 13 men mow in 7.5 days?

195. How many reams of commercial note paper each 8 in. long, 5 in. wide, and 3.5 in. thick, can be packed in a box, the inside dimensions of which are 3,  $41\frac{2}{3}$ , and  $\frac{7}{12}$  feet respectively?

196. A note given May 10, 1867, was paid August 10, 1868. How long did the note run?

 $196\alpha$ . How long is a field containing 14 A., if it is 35 rd. wide?

197. If I start from latitude  $15\,^\circ$   $35\,'$   $40\,''$  north, and travel due north 2,159 geographic miles, in what latitude shall I then be?

198. How many seconds in the circumference of a circle?

199. Is 217 a prime or a composite number?

200. The four sides of my garden are 168 ft., 280 ft., 182 ft., and 252 ft. respectively: what is the great-