

256. If a man travels 117 miles in 15 days, employing only 9 hours a day, how far would he go in 20 days, travelling 12 hours a day?

257. What is the square root of 9754.60423716?

258. If the extremes are 11 and 74, and the common difference 7, what is the sum of the series?

259. A man having \$10,000, lost 15 per cent. of it; what sum had he left?

260. What is the interest of \$850 for 1 year 7 mo. 18 days, at 7 per cent?

261. How long must \$165 be on interest at 6 per cent. to gain \$14.85?

262. What is the present worth of \$477.71, due 4 years hence, discounted at 6 per cent?

263. What is the present worth of a note for \$875.-35, payable in 7 mo. and 15 days, discounted at bank at 7 per cent?

264. If 29 lb. of butter will purchase 40 lb. of cheese, how many pounds of butter will buy 79 lb. of cheese?

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*Examination XII. June 9, 1870.*

265. Numerate, read or express in words 8096392-702.

266. Find the sum of  $\left\{ \begin{array}{r} 91784 \\ 794380 \\ 400084 \\ 5631 \\ 79840 \\ 957001 \\ 849987 \\ 451786 \\ 4670 \\ 501 \end{array} \right\} \left| \right.$

267. 2579584239456—249187654116 = ?

268. Multiply four hundred and sixty-two thousand six hundred and nine, by itself.

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269. Divide 1521808704 by 6503456.
270. If the remainder is 17, the quotient 610, and the dividend 45767, what is the divisor?
271. Resolve 7498 into its prime factors.
272. Find the greatest common divisor of 285 and 465.
273. What is the least common multiple, or dividend, of 16, 40, 96, and 105?
274. In 4 da. 4 hr. 45 min., how many seconds?
275. Reduce  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{1}{6}$ ,  $\frac{1}{7}$ ,  $\frac{1}{8}$ ,  $\frac{1}{9}$ , to equivalent fractions having the least common denominator.
276. Reduce 4 oz. 6 pwt.  $9\frac{3}{8}$  gr. to the fraction of a pound.
277. How many sq. ft. in the four side walls of a room  $16\frac{1}{2}$  ft. long, 15 ft. wide, and 9 ft. high?
278. The product of three numbers  $\frac{5}{7}$ ; two of the numbers are  $2\frac{1}{2}$  and  $\frac{7}{9}$ ; what is the third?
279. Add together 423 ten-millionths, 63 thousandths, 25 hundredths, 4 tenths, and 56 ten-thousandths.
280. What cost 5 T. 17 cwt. 20 lb. of hay, at \$30.50 per ton?
281. Reduce 10 oz. 13 pwt. 9 gr. to the decimal of a pound Troy.
282. Divide 0.01654144 by 0.0018.
283. One acre of corn yields 80 bushels, another acre 20 per cent. more; how many bushels does the second acre yield?
284. What is the amount of \$794 for 4 years and 4 months, at 7 per cent?
285. What is the bank discount of \$600 for 3 mo. at 6 per cent?

286. If  $\frac{3}{18}$  of a ship cost £273 2s. 6d., what will  $\frac{5}{32}$  cost?
287. If \$200 gain \$12. in one year, what will \$400 gain in 9 months?
288. Find the square root of  $4\frac{21}{5}$ ?
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*Examination XIII. Nov. 11, 1870.*

289. Write in figures each of the following numbers, add them, and express in words (or numerate) their sum: fifty-six thousand, and fourteen thousandths; nineteen, and nineteen hundredths; fifty-seven, and forty-eight ten-thousandths; twenty-three thousand five, and four-tenths, and fourteenth millionths.

290. What is the difference between  $3\frac{1}{4}$  plus  $7\frac{1}{8}$  and 4 plus  $2\frac{1}{4}$ ?

291. In multiplying by more than one figure, where is the first figure in each partial product written, and why is it so written?

292. If the divisor is 19, the quotient 37, and the remainder 11, what is the dividend?

293. What is the quotient of 65 bu. 1 pk. 3 qt. divided by 12?

294. Which one of the fundamental operations (or ground rules) of arithmetic is employed in reduction ascending?

295. In exchanging gold dust for cotton, by what weight would each be weighed?

296. Which is the largest prime number below 100?