1257. What is the discount, at 8 per cent, on a note for $750, payable, without interest, in 2 yr. 3 mo. 20 da.?

1258. Find the proceeds of a note for $1,000, due in 90 days, discounted at bank at 6 per cent.

1259. C owes D $900, of which $200 will be due in 3 mo., $300 in 6 mo. and the balance in 12 mo. What would be the mean or equated time of payment?

1260. In the firm of A. & B., A invested $200 for 7 mo. and B. $300 for 9 mo. They gained $125: what was each one's share of the gain.

1261. How many feet long is each side of a square acre?

1262. If fifteen men can do a certain piece of work in 90 days of 10 hours each, in how many days of 12 hours each can 20 men do the same work?

1263. What is the premium on a building valued at $3,000, insured for \( \frac{3}{8} \) of its value, at 2\( \frac{1}{2} \) per cent?

1264. Find the lacking term in the proportion.


1265. Find the length of the edge of a cubical box containing 262144 cu. ft.

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Examination XLVIII. June 15, 1882.

(10 to 12 A. M.)

1266. What do you understand by the prime factors of a composite number?

1267. Find the greatest common divisor of 360, 648, 972.
1268. Find the least common multiple of 14, 16, 21, 24, 112.

1269. Exchanged a carriage worth $140, and five sets of harness worth $29 each, for 45 cords of wood and $73.50: what was the wood valued at per cord?

1270. Express the present year of the Christian era, by Roman notation.

1271. Express in words: 645000021903.


1273. State the essential difference between common and decimal fractions.

1274. Write the table of linear (or long) measure.

1275. A owns \( \frac{3}{11} \) of a farm worth $15422, and sells \( \frac{2}{3} \) of his share. Find the value of what he has left.

1276. \( \frac{3}{4} \) of \( \frac{45}{6} \) divided by \( \frac{115}{6} \) = what?

1277. \((12 \times 5 \times 153 \times 35 \times 18 \times 2)\) divided by \((3 \times 14 \times 9 \times 5 \times 17 \times 20 \times 6)\) = what?

(Use cancellation.)

1278. Divide 87 lb. 8 oz. 19 pwt. 21 gr. by 7, leaving the result in the same denominations.

1279. Reduce .21675 T. to integers of lower denominations.

1280. How many flagstones averaging 2 ft. long by 1 ft. 3 in. wide will be required for a walk 250 ft. long and 4 ft. 6 in. wide?

1281. Find the side of a square field equivalent to a rectangular one 2859 yd. long and 714 yd. wide.

JUNE 16, 1882. 10 TO 12 A. M.

1282. If a pile of wood 36 ft. long, 4 ft. wide
and 5 ft. high cost $58.50, what will a pile 60 ft. long, 4 ft. wide and 6 ft. high cost at the same rate? (Solve by proportion.)

Suppose that Jonas Smith owes you $343, for which he gives his promissory note of this date, payable to your order in 90 days, with legal interest. (1283) Write a complete copy of the note, and (1284) compute the amount payable when due, including three days grace.

1285. How much can I realize on a note for $2144.50 due in 3 mo., 10 da., discounted at bank at 8 per cent.?

1286. Bought 150 bbls. of flour at $6.75 per bbl., and sold it at 12½ per cent. advance: what amount did it bring?

1287. How long must $240 be on interest at 8½ per cent. to amount to $266.40?

1288. A vessel and cargo are valued at $297000. The premium paid for insurance on ¾ of their value was $2475. What was the rate of insurance?

1289. What sum of money will amount to $228.60 in 2 yr. 4 mo. 18 da., at 6 per cent.

1290. How many gallons in 24½ hektoliters of wine? (A liter = 1.0567 qt.)

1291. Explain the difference between specific and ad valorem duties.

1292. Extract the cube root of 50653.

1293. The time at a certain place is 3 h. 15 min. earlier than at Washington. In what longitude, reckoned from Washington, is that place?