\$96. Three men gain \$2,640, of which B. is to have \$6 as often as C. \$4 and A. \$2; what is each one's share?

897. Find the square root of 10795.21.

898. What is the length of one side of a square piece of land containing 40 acres?

899. How is the true discount of a note found?

900. How is the bank discount of a note found?

901. How is the present worth of a note payable at a future time without interest, found?

## Examination XXXVII. Nov. 7, 1878.

- 902. Write in figures: two hundred thousand two hundred.
- 903. A man owns farms valued at \$56,800; city lots valued at \$86,760; a house worth \$12,500; and other property, \$6,785; what is the entire value of his property?
- 904. Bought 325 loads of wheat, each load containing 50 bu. at \$2 a bu. What did the wheat cost?
- 905. Find the greatest common divisor of 679 and 1,869.
- 906. Find the least common multiple of 4, 16, 20, 48, 60, and 72.
  - 907. What is the value of a fraction?
  - 908. Find the value of 12-1250.
- 909. If the divisor is less than a unit, how will the quotient compare with the dividend?

- 910. Divide 63 by  $\frac{7}{18}$ .
- 911. Find the difference between the continued products of 3,  $\frac{7}{3}$ ,  $\frac{2}{3}$ ,  $4\frac{2}{5}$ , and  $3\frac{7}{3}$ ,  $\frac{2}{5}$ , 4,  $\frac{2}{5}$ .
- 912. If 36.48 yd. of cloth cost \$54.72, what will 14.25 yd. cost?
- olls. A goldsmith manufactured 1 lb. 1 pwt. 16 gr. of gold into rings, each weighing 4 pwt. 20 gr. He sold the rings for \$1.25 apiece; how much did he receive for them?
- 914. How many times will a wheel 16 ft. 6 in. in circumference turn round in running 42 miles?
- 915. What is the value of § of a hogshead, in integers of lower denominations?
- 916. Washington is 77° 2′ 48″ west, and St. Petersburgh 30° 19′ east longitude; what is their difference of time?
  - 917. What is  $9\frac{4}{5}$  per cent. of 275 miles?
- 918. A man sends \$3,246.20 to his agent in Boston, asking him to lay it out in shoes, after deducting his commission of 2 per cent. How much is his commission?
- 919. A gentleman has a house insured for \$8,000, and the furniture for \$4,000, at 2\sqrt{g} per cent.: what premium must he pay?
- 920. State the difference between percentage and interest.
- 921. What is the interest of \$1,500.60 for 2 yr. 4 m v. at 6½ per cent.?
- 922. Find the amount of \$387.20, from Jan. 1 to Oct. 20, 1878, at 7 per cent.
- 923. A man was offered \$3,675 in cash for his house, or \$4,235 in three years without interest; he

accepted the latter offer; did he gain or lose, and how much, money being worth 7 per cent.?

924. What are the proceeds of a note for \$368, a' 90 days, discounted at bank at 6 per cent.?

925. If 16 horses consume 128 bushels of oats in 50 days, how many bushels will 5 horses consume in 90 days?

(Solve by Compound Proportion.)

926. Will the cube of  $\frac{18}{14}$  be greater, or less, than that fraction, and why?

927. What is the square root of .00008836?

928. The pedestal of a certain monument is a cube, containing 373,248 solid inches; what is the length of one of its sides?

929. A. loaned \$1,600, at 6 per cent., until it amounted to \$2,000; what was the time?

## Examination XXXVIII. Feb. 27, 1879.

930-31. Write and define any four (or more) of the following terms: Notation; Roman Notation; Arabic Notation; Decimal Scale or System; Duodecimals; Numerator; Quotient. (1 credit for 2, and 2 for 4 or more correct answers.)

932. Write 1879 according to the Roman Notation. 933. Add the numbers: 1, 12, 123, 1234, 12345, 123456, 1234567, 12345678, 123456789.

934. Bought wheat at 94 cts. per bushel, to the amount of \$59.22, and sold for \$70.56; what was the selling price per bushel?