ARITHMETIC

Tuesday, September 22, 1891—9:15 a. m. to 12:15 p. m., only

48 credits necessary to pass, 36

1. Define (a) sum; (b) quotient; (c) denominator; (d) square root. Give an example of each.

2. A man deposits in bank $986.46. At different times he has drawn the following amounts: $314.18; $49.25; $57.62; $39.84; $25.13. Find the amount remaining in the bank.

3. If 9 men earn $72 in 3 days how many dollars will 7 men earn in 6 days? (Solve by analysis and give the analysis in full.)

4. A news-boy buys 144 daily newspapers at 20 cents a dozen, and sells them at 3 cents each. At the end of 6 days he has 18 papers on hand. How much has he made during the week?

5. Which would be cheaper and how much, to buy quinine at $16.50 a pound avoid lupus or at $1.10 an ounce apothecaries weight?

6. How many meters of carpet, 90 centimeters wide, will cover a floor 6 meters long and 45 decimeters wide?

7. A close board fence, 40 rods long and 4 feet high, is to be made of boards 11 feet long and 8 inches wide. Find the value of the boards required, at $22.50 a thousand.

8. How high must be a pile of wood, 10 feet long and 2 1/2 feet wide, to contain one cord?

9. If a man walks 10 2/3 miles one day, 2 1/2 times as far the next day and on the third 1 3/4 as far as on the second, how far would he walk in the three days?

10. A publisher sold for $13,520 his stock of books which cost him $18,750. What was the rate of loss?

11. A pupil who attended school 63 days during a term, was marked 85% for attendance. How many days was he absent?

12. A real estate agent paid $8000 for an estate, 1/2% for insurance, $64 for taxes, and $1260 for repairs. The estate was sold for a two-months' note of $11,000, which was immediately discounted by a bank at 6% per annum. Find the gain or loss.

13. How much should be paid for 40 shares of railroad stock at 3 1/2% discount and 3/4% brokerage?

14. A certain town raised a tax of $4607.50. The real estate was valued at $420,000, the personal property at $189,000, and 1250 persons paid a poll tax of $1.25 each. Find the tax on one dollar of the property.

15. If rain-drops are falling directly downward, how much more surface would be protected from the rain by a board 20 feet long and 18 inches wide, when in a horizontal position, than when one end of it is elevated 9 feet higher than the other?