

# University of the State of New York

75TH EXAMINATION

## ARITHMETIC

TUESDAY, Jan. 20, 1891—9:15 A. M. to 12:15 P. M., only

48 credits, necessary to pass, 36

1. Define division. Tell when the quotient is abstract ; when concrete ; give an example of each case. 5
2. Write (a) the largest integral number that can be expressed by three figures ; (b) the smallest. Write the name of the first period at the right of the decimal point. 3
3. Why is the change of the decimal point two places to the left equivalent to dividing the number by 100 ? 1
4. Divide 1.2 by .0025 and subtract the divisor from the quotient. 3
5. A had one farm of 104 A 117 sq. rds ; another of 87 A 78 sq. rds. He reserved  $40\frac{1}{4}$  A and divided the remainder equally among his three sons. What was the share of each? 5
6. What will be the cost of a board 12 feet long and 16 inches wide at \$30. a thousand feet ? 3
7. What is the value of a pile of wood 12 ft. long, 8 ft. wide and 6 ft. high at \$4.50 a cord ? 3
8. What premium should be paid for insuring, at  $1\frac{2}{3}\%$ ,  $87\frac{1}{2}\%$  of a boat load of corn valued at \$1800 ? 2
9. If  $12\frac{1}{2}$  yds. of dress-goods  $\frac{3}{4}$  yd. wide will make a dress, how many yards of cambric,  $1\frac{3}{8}$  yds. wide, will be required to line one-half of it ? 3
10. A collector charges me 8% commission for collecting debt of \$775. How much do I receive ? 2
11. A note of \$350 for three months was discounted by a bank at 6%. How many pounds of wool at 35 cents a pound, can be bought with the proceeds ? 4
12. If 4 men dig a trench 84 ft. long and 5 ft. wide in 3 days of 8 hours each, how many men can dig a trench 420 ft. long and 3 ft. wide in 4 days of 9 hours each ? 5
13. If \$6 $\frac{1}{2}$  will buy 7 books how many books will \$10 $\frac{1}{2}$  buy ? Solve by analysis and give the analysis in full. 3
14. Find the square root of .00053361. 3
15. Find the cube of (a)  $2\frac{1}{2}$ , ( ) .006. 2
16. From 2.75 metres of cloth were cut 9 deci metres ; how much remained ? 1