

University of the State of New York

Examinations Department

79th examination

ARITHMETIC

Tuesday, Jan. 26, 1892—9 : 15 a. m. to 12 : 15 p. m., only

60 credits, necessary to pass, 45

1. Define abstract number, compound number, multiple, power, root, proportion. 6
2. Find the prime factors of 2618. 5
3. Simplify $\frac{3\frac{1}{2} \times 2\frac{1}{3}}{4} - \frac{1\frac{2}{3}}{2\frac{1}{8} + 1\frac{1}{4}}$ 6
4. Reduce $\frac{20265}{22967}$ to its lowest terms. 3
5. Divide .024 by $\frac{7}{8}$, and express the result both as a decimal and as a common fraction. 4
6. Find the cost of 24 scantlings each 3 x 4 in. and 24 ft. long at \$14 per M. 4
7. At 30 cents a square yard, how much will it cost to plaster the four walls and ceiling of a room 15 ft. x 18 ft. and 9 ft. high, no allowance being made for openings? 5
8. Make a receipted bill of the following: James Smith bought of Samuel Jones, Jan. 8, 1892, 25 lbs. sugar at 8 c., 4 lbs. coffee at 40 c., 2 lbs. tea at 60 c. 4
9. For what sum must I make a bank note at 90 days that the proceeds may be \$150? 4
10. Find the amount of \$165 at simple interest at 6 per cent from Sept. 15, 1891 to Jan. 12, 1892. 5
11. I buy goods at a discount of 25% from the list price (price list) and sell at the list price; what per cent profit do I make? 4
12. If 2 men earn \$9 in 3 days, how much will 5 men earn in 4 days. (Solve by analysis and write the analysis in full.) 4
13. How many rods in one side of a square field containing 10 acres? 3
14. How many liters of water will be contained in a cubical vessel whose edge is 1 meter? 3