

ARITHMETIC

Tuesday, January 18, 1910—9.15 a. m. to 12.15 p. m., only

The completion of the work of the eighth grade in arithmetic, as outlined in the syllabus for elementary schools, is the regular requirement, and any statement showing less or other than this should be accompanied by a satisfactory claim or explanation made by the candidate and certified by the principal; otherwise such paper will be returned.

Answer question 1 and nine other questions. No credit will be allowed unless all operations necessary to find results are given. Reduce each result to its simplest form and mark each answer Ans.

1 Add the following column of figures [No credit will be allowed unless the answer is fully correct]:

\$28.65	\$9.61	\$1.81	\$3.96	\$2.2	\$1.967	\$6.608	\$9.21	\$3.19	\$1.2	\$1.92	\$1.76	\$9.006	\$1.76	\$1.608	\$2.997	\$2.7	\$0.991	
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2 Multiply 78,092 by 105.68 [No credit will be allowed unless the answer is fully correct].

3 Define circumference, denominator, denominate number, commission, payee.

4 A man has three fields containing respectively $52\frac{1}{2}$, $75\frac{2}{3}$, and $67\frac{3}{5}$ acres; if he sells $84\frac{3}{5}$ acres how much of the land will he have left?

5 I need 273 planks 4 ft 8 in. long, 1 ft wide and $1\frac{1}{2}$ in. thick to build a sidewalk; how much will they cost at \$24.75 per thousand feet?

6 A man owning .375 of a ship sold $\frac{1}{5}$ of his share for \$25,896.45; what would be the total value of the ship at the same rate?

7 Find the cost of carpeting a room 26 ft long by 18 ft wide, with carpet $\frac{3}{4}$ of a yard wide, if the strips run lengthwise of the room and the carpet costs \$1.87 per yard. Illustrate. [2 credits will be allowed for illustration.]

8 A speculator buys 56 shares of R. R. stock at 98 and sells them at $123\frac{3}{4}$; find his gain, the brokerage in each case being $\frac{1}{2}\%$.

9 A boy purchased $3\frac{1}{2}$ pounds of butter at 32 cents a pound, 3 dozen of eggs at 26 cents a dozen, 5 pounds of prunes at 19 cents a pound and 8 bars of soap at $6\frac{1}{2}$ cents each; how much change should he receive if he gives a \$5 bill in payment?

10 The diagonal of a square is 30 ft; find to two decimal places the length of one side.

11 The dimensions of a tank are 8 m. long, 6 m. 5 dm. wide and 4 m. 2 dm. deep; how many liters of water will it hold?

12 A 90 day note for \$600 dated December 2, 1909, is discounted at a bank December 27, 1909 at $6\frac{1}{2}\%$; find the bank discount and the proceeds.