## New York State Education Department

## 209th High School Examination

## ARITHMETIC

## Tuesday, June 17 , 1913-9.15 a. m. to 12.15 p . m., only

Write at top of first page of answer paper (a) name of school where you have studied, (b) grade of work completed in arithmetic.
The minimum requirement is the completion of the work of the seventh grade in arithmetic, as outiined in the 1910 syllabus for elementary schools.
Answer to questions. No credit will be allowed unless all operations (except mental ones) necessary to find results are given; simply indicating the operations is not sufficient. Reduce each result to its simplest form and mark each answer Ans.
Questions a and 4 are given to test the accuracy of the pupil. No credit, therefore, will be allowed if the results are not correct.

I See separate sheet.
2 Solve a $6 \frac{3}{4}+9 \frac{1}{8}+17 \frac{5}{12}$

$$
b \quad 19 \frac{1}{3}-8 \frac{5}{6}
$$

$$
\begin{array}{ll}
c & 6 \frac{2}{3} \times 4 \frac{1}{5} \\
d & 5 \frac{1}{3} \div 2 \div 2
\end{array}
$$

Solve by cancelation $24 \times 36 \times 144 \times 96 \div 12 \times 18 \times 48 \times 84$ [ 2 credits will be allowed for each correct result.]
3 Write in words (a) $\frac{13}{25}$, (b) 153926, (c) 201.293
Subtract $\frac{1}{10}$ from .1. Multiply $\frac{3}{10}$ by .3.
4 Change these per cents to equivalent common fractions in their simplest forms, showing all the work: $6 \frac{1}{4} \%, 3 \frac{1}{8} \%, 120 \%, \frac{1}{2} \%$, $.2 \% \quad$ [ 2 credits will be allowed for each correct result.]
5 The standing of a seventh grade pupil in arithmetic was as follows: Sept. $89 \%$, Oct. $85 \%$, Nov. $91 \%$, Dec. $85 \%$, Jan.. $96 \%$, Feb. $8 \% \%$, Mar. $89 \%$, Apr. $97 \%$, May $96 \%$, June $88 \%$; what was his average standing for the year?

6 Find the compound interest on $\$ 420$ for 2 years at $4 \%$, if the interest is compounded semiannually.

7 One side of a square field is 40 rods long; how many acres are there in this field? What will it cost to fence it at $70 \phi$ a rod?

8 A note for $\$ 500$, without interest, is payable in 90 days; on the day the note is made it is discounted at a bank at $6 \%$. Find the proceeds.
9 A family use $2 \frac{1}{3}$ pounds of butter a week for a month of 30 days; at $35 \%$ a pound, how much will the butter cost?

10 Make a receipted bill for the following: C. A. Bryant bought of Harris, Smith \& Co., Troy, N. Y., 37 bu. of oats at $\$ .40 ; 50$ bu. of corn at $\$ .6 \frac{1}{2} ; 76$ bu. of wheat at $\$ 1.04 \frac{1}{4} ; 75$ bu. of rye at $\$ 1.04 ; 95 \mathrm{bu}$. of beans at $\$ 4.00 ; 16$ bu. of potatoes at \$.95. [Date the bill today.]

ARITHMETIC COMPUTATION TEST
[Twelve minutes allowed for this question]
Tuesday, June 17, 1913-9.15 a. m. to $12.15 \mathrm{p} . \mathrm{m}$.

I a Add

$$
\begin{aligned}
& 29764 \\
& 698 \\
& 83215 \\
& 64291 \\
& 37849 \\
& 82156 \\
& 74639 \\
& 84637 \\
& 69182 \\
& 35749 \\
& 21854 \\
& 79327 \\
& 68298 \\
& 61543 \\
& 29876
\end{aligned}
$$

