COMMERCIAL ARITHMETIC
Tuesday, August 23, 1932

NAME OF SCHOOL

NAME OF CANDIDATE

_____

Fill above blanks before signal to begin work is given by examiner.

Do not open this sheet till the signal is given.

Examiner will place this sheet closed on desk of each candidate. Candidate will open the sheet and begin work at signal from examiner. All parts of this test are to be worked mentally and the results placed on the sheet. At the end of 15 minutes work must stop and the pages used for this test must then be detached from the rest of the question paper and immediately collected.

All work must be done with pen and ink.

COMMERCIAL ARITHMETIC RAPID CALCULATION TEST

Tuesday, August 23, 1932 — 8.30 to 11.30 a. m.

1–2 *a* Add   [4]

```
  69345
   3723
 428765
  46238
  51723
   3462
    349
   1234
  98765
  24608
  13572
   4701
    234
   2648
  75318
  35729
   6949
   7969
```

b Make the extensions: [4]

100 articles @ $6.72 =

720 articles @ 62½¢ =

88 articles @ $1.75 =

25 articles @ 40¢ =

[Footing not required]

c Complete *each* of the following: [2]

½ of 1% expressed as a decimal is ....

20 is 25% of ....

d Subtract [2]

bu	pk	qt	pt
2	1	3	0
1	2	3	1

e Find the interest on *each* of the following: [4]

$234 for 50 days at 6% =

$ 56 for 10 days at 6% =

$480 for 30 days at 5% =

$600 for 24 days at 4% =

[Footing not required]

f Place answers in proper column: [4]

Selling price	Cost	Gain	Rate % of gain on selling price	Rate % of gain on cost
$432	$360	$72	....	....
$ 40	$ 16	$24	....	....

The University of the State of New York

255TH HIGH SCHOOL EXAMINATION

COMMERCIAL ARITHMETIC

Tuesday, August 23, 1932 — 8.30 to 11.30 a. m., only

Write at top of first page of answer paper (*a*) **names of schools where you have studied,** (*b*) **number of weeks and recitations a week in commercial arithmetic previous to entering summer high school,** (*c*) **number of recitations in this subject attended in summer high school of 1932.**

The minimum time requirement previous to entering summer high school is five recitations a week for a school year.

For those pupils who have met the time requirement previous to entering summer high school the minimum passing mark is 65 credits; for all others 75 credits.

For admission to this examination attendance on at least 30 recitations in this subject in a registered summer high school in 1932 is required.

Answer questions 1–2 and eight of the others. Unless otherwise stated all operations except mental ones must be shown. Practical business methods must be used in the solutions.

1–2 Rapid calculation test on attached sheet. [20]

3 Copy the letters *a* to *j* and after each write the letter *T* if the orresponding statement is *true* or the letter *N* if it is *not* [10]

 a If a note is dated January 2 and is to run for three months, the date of maturity is April 2.

 b Moving the decimal point two places to the right in a sum of money gives the interest for 60 days at 6%.

 c Inward freight is considered part of the cost of merchandise.

 d Adding a new porch to a house is considered an increase in investment and not an expense.

 e To add 98 to a number, you should add 100 and subtract 2.

 f A profit of 20% on the selling price is equal to a profit of 25% on the cost.

 g A trade discount sheet usually accompanies a catalog because it is cheaper to print a new sheet than to print a new catalog.

 h The perimeter of a figure is found by multiplying the length by the breadth.

 i A person who insures for three years is given a cheaper rate than the person who reinsures each year for three years.

 j Trade discount is a deduction given for prompt payment.

4 Answer all parts of this question. [10] [Deduct 2 credits for each incorrect answer. Answers only are required in this question.]

 a A boy received the following percentages in commercial arithmetic: Monday 75%, Tuesday 90%, Wednesday 60%, Thursday 85%, Friday 80%; what was his average per cent for the week?

 b A house worth $9000 was insured for $\frac{2}{3}$ of its value. If the annual rate is 55¢ per $100, what was the premium?

 c An automobile salesman receives a salary of $25 a week and a 5% commission on all sales over $2000. How much did he make in February, if his sales amounted to $10,000?

 d On June 1, an electric meter registered 1637 kilowatt hours and on July 1 the meter registered 1652 kilowatt hours. Find the electric bill for the month of June if the charge was 8¢ per kilowatt hour.

 c A newspaper paid a boy 15¢ for every dollar that he collected. He was paid $45. How much money did he collect?

5 Answer all parts of this question. [10] [Deduct 2 credits for each incorrect answer. Answers only are required in this question.]

 a A man desired to create a trust fund that would give his son an income of $200 a year. How much money must he place in a bank that pays 4% annually to obtain that income?

 b The registration in a certain school district is 740 pupils. During an epidemic 75% were absent. How many pupils were present?

 c On an invoice of $300, how much will be saved by taking advantage of the discount, if the terms are $^3/_{10}$ $^n/_{30}$?

 d The village census showed 1200 inhabitants. The tax budget was $25,088. Find to the *nearest mill* the cost per person of running the village.

 c A man's salary was $2500, of which he saved 3%; how much did he save?

6 Machinery that cost $50,000 was valued at the end of eight years at $10,000.

 a What was the average annual depreciation? [5]

 b What per cent of the cost was the total depreciation? [5]

[OVER]

7 On March 1, 1932, a demand note was issued for $1250, with interest at 6%. A payment of $600 was made June 1. How much should be paid if settlement is made today? [10]

8 A refrigerator manufacturer lists a refrigerator at $270, subject to trade discounts of 20% and 16¾%. The manufacturer requires the dealer to bill at a fixed price, which gives the dealer a profit of 40% on the selling price. What is the selling price? [10]

9 The owner of an automobile bought a new tire for his car for $18. When the tire was placed on the car the speedometer registered 12,350 miles and when it was discarded the speedometer registered 27,350 miles.

   a How many miles had the tire traveled? [2]

   b Find to *four* decimal places the tire cost per mile. [6]

   c Express the answer in mills. [2]

10 The National Safety Council in a recent bulletin reports that of 20,000 children who came to an untimely end the preceding year, 942 were New Yorkers and that of the New York children 403 were killed in automobile accidents.

   a What per cent of all the children who were killed were New Yorkers? [5]

   b What per cent of the New York children were killed in automobile accidents? [5] [Adjust answer to the *nearest tenth per cent.*]

11 During the year 1930 the sales of an automobile agency in cars and service amounted to $126,750. Of this amount 30% was net profit. Due to the business depression in 1931, the cost of doing business was reduced from 25% to 15% of the total sales and the net profit was 12% of the total sales.

   a What was the amount of the net profit in 1930? [5]

   b How much business did the agency do in 1931 if the profit was equal to that of 1930? [5]