The University of the State of New York

282D HIGH SCHOOL EXAMINATION

BUSINESS ARITHMETIC

Friday, August 22, 1941 — 8.30 to 11.30 a. m., only

Fill in the following lines:

Name of pupil..Name of school..

Instructions

Do not open this sheet until the signal is given.

All parts of the rapid calculation test are to be worked mentally and the results placed on the question paper. At the end of 15 minutes, work must stop and the sheet used for this part of the examination must then be detached from the rest of the question paper and immediately handed to the examiner.

All work must be done with pen and ink.

RAPID CALCULATION TEST

1–2 *a* Add: [4]

36251
3693
12487
3944
24862
6990
4279
3964
3964
8795
46286
4699
3286
6857
2389
14326

b Find the interest on *each* of the following: [5]

$480 for 80 days . at $4\frac{1}{2}\%$ =
$1275 for 6 days at 3 % =
$600 for 159 days at 4 % =
$1360 for 42 days at 6 % =
$400 for 3 months at $1\frac{1}{2}\%$ =

c Make the extensions: [5]

$37\frac{1}{2}$ yd @ $ .48 =
265 yd @   .80 =
117 yd @ $1.33\frac{1}{3}$ =
432 yd @ $.87\frac{1}{2}$ =
$62\frac{1}{2}$ yd @   .24 =

d Solve: [4]

48 $+$ .3 =
36 $-$ 1.2 =
4.14 $\times$ .7 =
18 $\div$ .9 =

e Subtract: [2]

bu.	pk	qt
4	0	0
2	3	3

BUSINESS ARITHMETIC

Friday, August 22, 1941 — 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 business arithmetic previous to entering summer high school, (*c*) number of recitations in this subject attended in summer high school of 1941.

The minimum time requirement is five recitations a week for a school year. The summer school session in business arithmetic will be considered the equivalent of one semester's work during the regular session or five recitations a week for half a school year.

For those pupils who have met the time requirement 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 1941 is required.

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

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

3 Answer all parts of this question. [10] [Two credits for each correct answer; no partial credit. Answers only are required in this question.]

  a A salesman working on a 5% commission had an income of $2000 during 1940. What was the value of the goods he sold?

  b Pencils that cost $3.24 a gross (12 dozen) are sold at 3¢ each. Find the gain per cent on the cost.

  c A catalog lists a certain stove at $90. The same stove is billed to merchants at $72. What rate of discount is allowed?

  d An article that sold for $23.75 was sold at a loss of 5% on the cost. Find the cost of the article.

  e When the bank balance is $975.80 and checks for $18.75 and $110.15 are outstanding, what is the actual cash balance?

4 A jobber buys goods listed at $1200 with the option of 30% discount for cash or of successive discounts of 20% and 10% and 90 days credit. How much would he gain if he borrowed the money at 6% for 90 days in order to take advantage of the cash discount? [10]

5   Jamestown, N. Y., August 7, 1941

Three months after date I promise to pay to the order of......John Edwards.......$450.00
Four hundred fifty and no/100.. Dollars
Value received with interest at 5%.   [*Signed*] Frank Elliott

  a How much will Mr Elliott have to pay when the note is due? [2]

  b On August 19, Mr Edwards discounted the note at his bank at 6%. How much did the bank charge him? [6]

  c How much did the bank pay Mr Edwards for the note? [2]

[3]   [OVER]

6 A dealer failed in business with liabilities amounting to $69,300. His assets totaled $33,783.75.

   a Find exactly how much on a dollar the dealer will be able to pay his creditors. [6]

   b Lawrence Jackson has two claims against this dealer, amounting to $1580 and $848.80 respectively. Find the total sum that he will receive in settlement of his claims. [4]

7 The cashier at a cafeteria sorted her checks and found that she had the following:

21 for 10¢	17 for 20¢	107 for 35¢
10 " 12¢	21 " 22¢	172 " 40¢
13 " 15¢	14 " 25¢	34 " 45¢
4 " 17¢	12 " 30¢	5 " 50¢

   a Find the sales for the day. [4]

   b Find, to the *nearest tenth of a cent,* the average amount paid per customer. [6]

8 The Acme Electric Company, manufacturers of electric refrigerators, sell their model A-63 at $135, less $33\frac{1}{3}$% and 20%. At what price must a dealer mark this refrigerator to make a profit of 40% on the selling price after allowing an advertised discount of $16\frac{2}{3}$% on the marked price? [10]

9 While a certain shoe was selling at $13 a pair, a store sold an average of 10 pairs a day. By reducing the price to $12.50, the store increased its sales to 15 pairs a day, with no increase in selling expense. The shoes cost $6.30 a pair.

   a By how much was the daily profit increased or decreased? [6]

   b Find, correct to the *nearest tenth per cent,* the per cent of increase or decrease in the daily profit on this line of shoes. [4]

10 A man is offered a piece of property for $12,000. It rents for $130 a month. It is assessed for $9600 and the tax rate this year is $3.25 per hundred dollars. The average annual cost of insurance on the property is $53 and the man estimates depreciation and repairs at $550 a year.

   a Find the amount of the tax this year. [2]

   b What rate of interest could the man make if he invested in this piece of property? [8]

11 Frank Wheeler, as head of a family, submitted the following facts on his 1940 federal income-tax blank:

His income consisted of salary $4300, dividends from stock $325, interest on bank deposits $100, taxable income from annuities $250. He claimed the following deductions: interest on mortgage $255, taxes $230, charitable contributions $125. He is allowed an exemption of $2000 as a married man, $400 for a dependent child and $400 for a dependent mother. He is also allowed an additional exemption of $430 (earned income credit).

The tax rates which applied to Mr Wheeler's net income were 4% for the normal tax and 10% of the normal tax for the defense tax.

Find the total income tax paid by Mr Wheeler. [10]

12 A commission merchant received from a farmer a shipment of 6 cases of eggs, 30 dozen to a case, and 198 barrels of apples. He sold the eggs at 24¢ a dozen and the apples at $3.75 a barrel. The expenses in connection with the sale were: freight and drayage $37.90, commission 5%, collection and guaranty 2%, other charges $15.25.

   a What was the total amount the commission merchant received from the sale of the shipment? [4]

   b What was the amount of the check sent to the farmer? [6]