

The University of the State of New York

295TH HIGH SCHOOL EXAMINATION

BUSINESS ARITHMETIC

Thursday, August 23, 1945 — 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.

This is a mental test — scrap paper may not be used.

RAPID CALCULATION TEST

1-2 a Add: [4]

4913
 2086
 7159
 5702
 8163
 6247
 9648
 5310
 2761
 1490
 3256
 8711
 4680
 2135
7948

b Make the extensions: [5]

120 yd @ \$1.25 =
 330 bu. @ $33\frac{1}{3}\phi$ =
 320 doz. @ $87\frac{1}{2}\phi$ =
 1500 lb. @ \$20 per ton =
 250 articles @ 9ϕ =

c Compute the interest: [5]

\$200 for 36 days at 6% =
 \$990 for 4 months at 3% =
 \$1200 for 54 days at 2% =
 \$880 for 33 days at 6% =
 \$600 for 75 days at 5% =

d Complete each of the following: [2]

$1\frac{1}{4}\%$ expressed as a decimal is _____

35 is $\frac{5}{4}$ of what number? _____

e Place answers in proper columns: [4]

<i>Selling price</i>	<i>Cost</i>	<i>Gain</i>	<i>Rate of gain on selling price</i>	<i>Rate of gain on cost</i>
\$360	\$300	\$60	_____	_____
\$210	\$140	\$70	_____	_____

BUSINESS ARITHMETIC

Thursday, August 23, 1945 — 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 1945 or number and length in minutes of lessons taken in the summer of 1945 under a tutor licensed in the subject and supervised by the principal of the school you last attended.

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 1945 or an equivalent program of tutoring approved in advance by the Department 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 Equipment that cost \$12,000 was valued at the end of 5 years at \$2000. What was the amount of the average annual depreciation?

b A war worker saved \$100, which was 5% of his wages. What were his wages?

c A dealer receives an invoice for \$400, terms 2/10, n/30. Find the net amount of the invoice if paid within 10 days.

d Find the number of days for which the bank charged discount on a two-months note dated June 1, 1945, and discounted June 6, 1945.

e A man sold a house for \$4000, thereby sustaining a loss of 20% on the cost. What was the cost of the house?

4 A man's salary is \$300 a month. His expenses each month are as follows: rent \$70, gas \$4.25, electricity \$3.75, telephone \$3.50, food 25% of his salary. Certain other expenses total \$600 a year.

a Taking into consideration all of the above expenses, what is his average monthly expense? [5]

b How much can he save in a year? [5]

5 On June 1, 1944, Brown, Smith, and Jones formed a partnership to conduct a retail business. They invested \$5000, \$10,000 and \$20,000, respectively. At the end of the first year their gross profits were \$8340 and their expenses were \$1340.

a If each partner received 5% interest on his investment and the remaining profits were shared equally, what was

(1) Brown's total share of the net profit? [2]

(2) Smith's total share of the net profit? [2]

(3) Jones's total share of the net profit? [2]

b If the partners had agreed that profits and losses were to be shared in proportion to the investments with no allowances for interest, what would have been Brown's share of the profit? [4]

BUSINESS ARITHMETIC — *concluded*

6 The Office Supplies Company keeps a record of the sales of its representatives. White's average weekly sales for 10 weeks were \$495.75. His sales for the 11th and 12th weeks were \$463.50 and \$502.20, respectively.

- a Find White's total sales for the 12 weeks. [5]
- b Find his average weekly sales for the 12 weeks. [5]

7 During the 7th War Loan Drive, the sales of stamps and bonds for one day in the following schools were:

<i>School</i>	<i>Stamps</i>	<i>Bonds</i>
Washington	\$82.30	\$187.50
Lincoln	67.55	168.75
Riverside	101.25	243.75
Project	46.30	56.25
Roosevelt	159.80	1125.00

- a What was the total of the stamp sales? [1]
- b What was the total of the bond sales? [1]
- c What was Washington School's percentage of the total stamp sales? [Solve to the *nearest per cent.*] [4]
- d What was Riverside School's percentage of the total bond sales? [Solve to the *nearest per cent.*] [4]

8 A dealer purchased a special garment at \$36 per dozen, less 20% and 10%.

- a At what price must he sell each garment to gain 25% of the selling price? [5]
- b At what price must he sell each garment to gain 25% of the cost? [5]

9 A dwelling cost \$9000. Annual expenses are: taxes \$230, repairs \$118, insurance \$26, water \$16.

- a What must the annual net income be to realize 5% on the investment? [2]
- b What must the annual gross income be to realize 5% on the investment? [4]
- c What monthly rent must be charged? [4]

10 a Three companies insured a building as follows: Acme Company \$10,000, Union Company \$8000, Stock Company \$7000. A fire loss of \$1875 occurred. What is *each* company's share of the loss? [6]

- b Another building, which is valued at \$10,000, is insured for \$7000 under a policy containing an 80% coinsurance clause. In the event of a fire loss of \$2400, what would the insurance company have to pay? [4]

11 On July 1, Albert Hard's bank statement had a balance of \$710.35. His checkbook balance was \$582.45. The following items appeared on the bank statement but not in the checkbook: \$1.50 service charge, \$95 note collected. A deposit of \$95.25 was made on June 30 and was entered in the checkbook but not on the bank statement. Outstanding checks were: \$28.90, \$60.15, \$40.60.

- a Prepare a bank reconciliation statement. [8]
- b On the statement you prepare, indicate the correct checkbook balance. [2]

12 A school district received the following income to assist them in financing the cost of their schools: State aid \$130,190.15, nonresident tuition \$5752.90, Federal aid for special courses \$2820.75. They planned that the total cost of conducting their schools would be \$336,429.34. The assessors valued the taxable property in the school district at \$10,105,600.

- a Find the tax rate. [Carry the decimal to *five* places.] [8]
- b A resident of the school district owned property valued at \$10,000 which was assessed for 90% of its value. What would be the amount of his school tax? [2]