

The University of the State of New York
REGENTS HIGH SCHOOL EXAMINATION
BUSINESS ARITHMETIC
Monday, January 20, 1958—9:15 a.m. to 12:15 p.m., only

Fill in the following lines:

Name of pupil.....Name of school.....

Instructions for Part I

Do not open this sheet until the signal is given.

All parts of the rapid calculation test are to be worked mentally and the *answers only* 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 answers must be written with pen and ink.

Scrap paper may not be used, nor may computations be made on the question paper.

Part I

RAPID CALCULATION TEST

1 a Make the following extensions: [5]

- 360 bushels at $16\frac{2}{3}$ cents per bushel = \$.....
- 75 pounds at 88 cents per pound = \$.....
- 250 yards at \$1.50 per yard = \$.....
- 4500 pounds at \$10 per ton = \$.....
- 32 quarts at $62\frac{1}{2}$ cents per quart = \$.....

b Compute the interest: [5]

- \$386.50 for 60 days at 6% = \$.....
- \$500 for 12 days at 3% = \$.....
- \$860 for 75 days at 6% = \$.....
- \$640 for 30 days at $4\frac{1}{2}$ % = \$.....
- \$60 for 97 days at 6% = \$.....

c Fill in the correct answer for *each* of the following problems: [6]

- 4.694 multiplied by 100 is
- $\frac{1}{3}$ of \$324 is
- A 3% sales tax on an article marked at \$60 would make the total cost price
- 58.72% expressed as a decimal to the *nearest hundredth* is
- At 20¢ per pound, how many pounds can a person buy for \$5.00?
- 37 feet is equal to how many yards?

d Complete the following daily sales report: [No partial credit.] [4]

<i>Department</i>	<i>Cash Sales</i>	<i>Charge Sales</i>	<i>Total Sales</i>
A	\$ 44.10	\$ 32.40	\$
B	76.39	90.05
C	124.00	36.75
D	15.50	120.00
TOTALS	\$	\$	\$

BUSINESS ARITHMETIC

Monday, January 20, 1958

Part I, 1 Rapid calculation test on attached sheet. [20]

Part II

Answer any four questions from this part. All work must be shown.

- 2 Answer all parts of this question. [Two credits for each correct answer ; no partial credit.] [10]
- a Johnson insured his house for 3 years for \$15,000. The rate for the entire 3-year policy was 75 cents per \$100. What was the average annual cost of this policy to Johnson?
 - b A pupil obtained marks of 98, 82, 90 and 87 on four tests given recently. What mark must he obtain on his fifth test in order to have an average mark of 90 for all five tests?
 - c On March 27, Jones bought goods on terms of $\frac{3}{10}$, $\frac{1}{30}$, $\frac{N}{60}$. What is the last date on which he can make payment for these goods if he wishes to take advantage of the 1% discount?
 - d An automobile tire sold for \$28.56 after a mark-up of 40% of the original cost had been added. What was the original cost of this tire?
 - e What single percent of discount is equal to a series of discounts of 20% and 5%?
- 3 Answer all parts of this question. [This is an accuracy test. One credit for each correct answer ; no partial credit ; no credit allowed unless work is shown. Wherever necessary, reduce the answer to simplest form.] [10]
- a Add: 10.936 ; 213.84 ; 12.64 ; 306.003
 - b Subtract 186.38 from 492.875
 - c Divide 30.732 by 118.2
 - d Multiply 287.1 by 3.05
 - e Add: $3\frac{2}{3}$; $11\frac{5}{12}$; $12\frac{1}{4}$; $5\frac{1}{4}$
 - f Subtract $5\frac{3}{8}$ from $27\frac{1}{4}$
 - g Divide $6\frac{5}{8}$ by $5\frac{1}{8}$
 - h Multiply $36\frac{1}{2}$ by $4\frac{2}{3}$
 - i Express .425 as a fraction in *lowest terms*.
 - j Express $\frac{3}{8}$ as a percent correct to the *nearest tenth of a percent*.
- 4 Barnes wished to purchase 12 portable typewriters for the use of his salesmen. The Harper Company has offered him a price of \$110 per machine, less 25% and 10%, terms $\frac{N}{30}$. The Hi-Speed Company has offered him a price of \$135 per machine less 40%, terms $\frac{2}{10}$, $\frac{N}{30}$. If Barnes can afford to pay cash for these machines, which of the two offers is better and how much? [10]
- 5 On November 1, J. C. Allen's checkbook balance was \$1417.50. On the same date the monthly statement from the bank showed a balance of \$1578.40. Checks for the following amounts were outstanding: \$74.50, \$91.42, \$27.48. A comparison of the statement with the checkbook showed that the following items, which were *not* recorded in the checkbook, had been paid: a canceled check for \$20.10 and a charge of \$3.40 for banking services. The amount of one of the canceled checks was \$421, while the amount on the checkbook stub was \$412. Prepare a reconciliation statement, indicating Allen's correct available checkbook or bank balance. [10]
- 6 Glenday invested \$8000 and Weiss invested \$12,000 in a partnership. Each partner is to be allowed 6% on his investment, and the balance of the profits is to be shared equally. During the past year the partnership's gross gain was \$10,480, and the expenses amounted to \$2440.
- a Find the net gain. [2]
 - b Find *each* partner's share of the net profit. [8]

Part III

Answer any four questions from this part. All work must be shown.

- 7 As an investment, Mr. Joseph purchased a house for \$12,000, paying the full purchase price in cash. What monthly rental must he charge in order to realize a net income of 5% on his investment if the annual expenses are \$240 for depreciation, \$105 for repairs, \$340 for taxes and \$35 for insurance? [6]
- 8 A fruit dealer purchased a carload of peaches consisting of 1280 bushels at a total cost of \$1600. He sold 40% of the fruit at \$2.25 per bushel, 16 $\frac{2}{3}$ % of the remainder at \$2.00 per bushel and the balance at \$1.20 per bushel. Find the dealer's gross profit on the carload of peaches. [6]
- 9 A building worth \$42,000 and insured for \$28,000 is damaged by fire to the extent of \$7800. If the policy contains the 80% co-insurance clause, how much will the insurance company have to pay to the owner? [6]
- 10 The Davison Corporation asked a commission merchant to purchase 1500 bushels of potatoes for the corporation. The potatoes were purchased at \$1.75 a bushel. Expenses involved in this purchase were: commission 4%, freight and cartage \$225. Find the total cost of the potatoes to the Davison Corporation. [6]
- 11 In the village of Whitesburg the amount of money needed for the total estimated expenses for the year was \$286,875. Of this amount, \$3150 was expected to be received from licenses and other income. If the total assessed valuation of all taxable property in the village was \$9,750,000, what tax rate per \$100 would need to be levied in order to raise the necessary funds? [6]

Part IV

Answer any four questions from this part. All work must be shown.

- 12 Five years ago Mr. Simmonds bought a new car for \$2550. Today the car is worth \$400. What was the average annual *percent* of depreciation correct to the *nearest tenth of a percent* on this automobile? [4]
- 13 A bankrupt firm paid its creditors 55% of what was due them. If \$1100 was paid to Robertson, one of the creditors, what was the original amount of his claim? [4]
- 14 A dealer purchases end tables at \$12 less 10%. At what price should he mark these tables in order to gain 25% on the selling price? [4]
- 15 Smith can buy a television set on the installment plan for a total cost of \$337.50, including carrying charges. If he pays 20% of the total cost as a down payment and the balance in equal monthly payments of \$15 each, how many months will it take to pay for the television set? [4]
- 16 Kretz is employed on a 40-hour-per-week basis, with time and a half for all overtime. His regular pay is \$2.10 per hour. During the past week he worked 44 hours. Total deductions for Social Security and Withholding Tax amounted to \$12.80. What amount of money did Kretz receive as take-home pay for the past week after all deductions had been made? [4]