

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

BUSINESS ARITHMETIC

Thursday, August 21, 1958 — 8:30 to 11:30 a.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 Subtract [2]

$$\begin{array}{r} \$84.00 \\ 9.59 \\ \hline \end{array}$$

b Underscore the correct answer for *each* of the following problems: [4]

At 20 cents per pound, a person can buy (2; 4; 50; 20) pounds for \$10.

48.74% expressed as a decimal to the *nearest hundredth* is (.4874; .49; 4.87; 48.70).

10% of \$598 is approximately (\$600; \$60; \$6; \$60).

48% expressed as a fraction in lowest terms is ($\frac{48}{100}$; $\frac{96}{200}$; $\frac{12}{25}$; $\frac{24}{50}$).

c Compute the interest on: [5]

\$125 for 12 days @ 6% = \$_____

\$780 for 60 days @ 2% = \$_____

\$1600 for 45 days @ 3% = \$_____

\$1250 for 3 months @ 6% = \$_____

\$60 for 240 days @ 5% = \$_____

d Make the following extensions: [5]

75 yards @ 72¢ per yard = \$_____

15 bushels @ \$1.20 per bushel = \$_____

9 yards @ 16½¢ per foot = \$_____

2500 pounds @ \$20 per M = \$_____

320 gallons @ 37½¢ per gallon = \$_____

e Complete the following table of school enrollment: [No partial credit.] [4]

	Boys	Girls	Totals
Elementary Schools	845	906	
Junior High School	315	347	
Senior High School	408	431	
TOTALS			

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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 How much would license plates cost for an automobile weighing 3,500 pounds if the rate is 50 cents for each 100 pounds?
 - b An automobile that cost \$2,450 four years ago can be traded in today for \$860. What is the average annual depreciation?
 - c If a two-months note dated July 18 was discounted on August 2, what would be the term of discount?
 - d An invoice for \$1,250, which is dated July 25, has terms of $\frac{3}{10}$, $\frac{1}{20}$, $\frac{N}{60}$. What amount of money is needed to pay this invoice on August 10?
 - e A furniture dealer sold a desk listed at \$145 for \$123.25. What percent of discount was allowed?
- 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 Subtract $6\frac{3}{4}$ from $72\frac{1}{4}$
 - b Divide $17\frac{1}{4}$ by $2\frac{1}{4}$
 - c Multiply $33\frac{1}{2}$ by $6\frac{3}{4}$
 - d Add $12\frac{1}{2}$; $30\frac{5}{16}$; $7\frac{3}{4}$
 - e Divide 919.56 by 7.9
 - f Subtract 39.272 from 456.16
 - g Add 17.8; 9.43; 32.04; 104.042
 - h Multiply 74.31 by 3.05
 - i Express .425 as a fraction in lowest terms
 - j Express $\frac{7}{9}$ as a percent correct to the nearest tenth of a percent
- 4 Kennedy and Kelly are members of a partnership, with investments of \$17,400 and \$12,600, respectively. The partnership agreement states that the net profit is to be divided as follows: "Each partner is to receive 5% interest annually on his investment; the remaining profit is to be divided equally." The net profit for the firm for last year was \$9,680. What amount of money did each partner receive as his total share of this net profit? [10]
- 5 The assessed valuation of taxable property in a school district is \$7,550,500. The cost of operating the schools amounts to \$301,650.59. The school district's income from various sources is \$134,180.50.
- a What is the tax rate per dollar? [Carry the decimal to five places.] [6]
 - b What would be the amount of Abraham Schuler's school tax if his property is valued at \$15,000 and is assessed at 80% of its value? [4]
- 6 Butterworth shipped 750 bushels of peaches to a commission broker to be sold. The broker sold 425 bushels at \$2.75 per bushel and the remainder at \$2.10 per bushel. He deducted 5% commission, freight charges of \$41.40 and storage expenses amounting to \$24.80. How much should Butterworth receive as net proceeds of this sale? [10]

BUSINESS ARITHMETIC — *concluded*

Part III

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

- 7 A building valued at \$10,000 was insured for \$7,500. The policy contained an 80% coinsurance clause. The owner paid a premium of 65 cents per \$100 for 3 years.
- a What was the average annual cost of the policy? [2]
- b If a fire caused a loss of \$4,800, how much would the insurance company pay? [4]
- 8 On July 31, 1958, Judson's checkbook balance was \$1,307.50. His bank statement on that date showed a balance of \$1,044.65. One check for \$59.65 was outstanding. A deposit of \$320, made by mail, had not been received by the bank in time to be added to the statement. Enclosed with the bank statement was a service charge slip for \$2.50, which the bank had deducted from Judson's account. Prepare a reconciliation statement indicating Judson's correct available checkbook or bank balance. [6]
- 9 Jacobson, a dealer in electrical appliances, purchased a washing machine for \$240, less 20% and 10%. He sold the machine for \$245 less 15%. What amount of gross profit did Jacobson make? [6]
- 10 Miss Alice Jones is employed at the Style-Rite Belt Company on a piecework basis and is paid 9 cents for each piece completed and accepted. During a recent week she completed the following number of pieces:
- | | |
|-----------|-----|
| Monday | 152 |
| Tuesday | 161 |
| Wednesday | 157 |
| Thursday | 138 |
| Friday | 142 |
- A total of 17 pieces of work was not accepted. Miss Jones' Withholding Tax was \$12.30. Social Security taxes and other deductions amounted to \$1.80. What amount of money did she receive as take-home pay for the week, after these deductions had been made? [6]
- 11 Maloney, a rug dealer, bought a rug for \$118, less 10%. Freight charges on the rug amounted to \$3.80. At what price must he sell the rug in order to make a profit of 20% on the total cost? [6]

Part IV

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

- 12 What is the average cost per pound of a mixture of tea consisting of 25 pounds at 88 cents, 20 pounds at \$1.25 and 10 pounds at \$1.35? [4]
- 13 A stove may be purchased for \$210 cash, or on the installment plan by paying \$66.50 down and 10 monthly installments of \$17.50 each. By what percent does the installment price exceed the cash price? [4]
- 14 Paxton's New York State income tax return for the past year showed a net taxable income of \$2,472. This income was subject to a 2% tax on the first \$1,000 and a 3% tax on the next \$2,000 or any fraction thereof. What was the total amount of Paxton's income tax for last year? [4]
- 15 A merchant bought sport caps at \$21 a dozen and sold them at \$2.50 each. What was the percent of gross profit based on the selling price? [4]
- 16 Strong paid \$35.70 for a floor lamp. This price included a 2% sales tax, which was based on the original marked price. What was the original marked price of this lamp? [4]

[4]