

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

**BUSINESS ARITHMETIC**

Tuesday, June 17, 1958 — 1:15 to 4:15 p.m., only

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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 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]

- 36 yards at 66 $\frac{2}{3}$ ¢ per yard = \$ .....
- 25 pounds at 72¢ per pound = \$ .....
- 160 board feet at 12 $\frac{1}{2}$ ¢ per board foot = \$ .....
- 320 bushels at \$1.25 per bushel = \$ .....
- 2500 pounds at \$30 per ton = \$ .....

b Compute the interest: [5]

- \$940 for 2 months @ 6% = \$ .....
- \$750 for 12 days @ 4% = \$ .....
- \$800 for 90 days @ 5% = \$ .....
- \$3600 for 20 days @ 3% = \$ .....
- \$1980 for 30 days @ 6% = \$ .....

c Complete each of the following: [6]

- $\frac{3}{4}$ % of \$1600 is \$ .....
- 72 is 20% greater than .....
- 51 feet is equal to how many yards? .....
- 56.7% expressed as a decimal to the nearest hundredth is .....
- If an article costing \$60 is sold for \$90, the percent of gain, based on the selling price, is .....
- .....%
- The exact number of days from July 27 to September 5 is .....

d Complete the following summary of sales made: [No partial credit.] [4]

Salesmen	First Period	Second Period	Total
Judson	\$1054	\$ 997	\$
Hawkins	2118	2086	\$
Silver	837	1505	\$
<b>TOTALS</b>	\$	\$	\$

# BUSINESS ARITHMETIC

Tuesday, June 17, 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 An airplane made a nonstop flight of 1365 miles in 7 hours and 30 minutes. Find the average speed per hour.
  - b Mr. Brown insured his household furniture, valued at \$2250, against fire loss for 80% of the value, at 96¢ per \$100. Find the premium.
  - c An appliance dealer sold a radio listed at \$50 for \$42.50. What percent of discount was allowed?
  - d What single percent of discount is equal to a series of discounts of 20% and 10%?
  - e At  $12\frac{1}{2}$ ¢ a square foot, what will it cost to have an 8 foot by 10 foot rug cleaned?
- 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  $3\frac{1}{4}$ ;  $16\frac{1}{2}$ ;  $9\frac{5}{8}$
  - b Subtract  $6\frac{3}{8}$  from 11
  - c Divide  $16\frac{1}{2}$  by  $3\frac{2}{3}$
  - d Multiply  $24\frac{3}{4}$  by  $8\frac{1}{2}$
  - e Subtract 9 hours 31 minutes from 12 hours 22 minutes
  - f Express .525 as a fraction in lowest terms
  - g Add 4.468; 49.44; 169.2; 56.37
  - h Subtract 278.43 from 604.8
  - i Divide 364.56 by 37.2
  - j Multiply 92.4 by 3.7
- 4 Thompson employed a commission merchant to buy 650 crates of oranges for him. The merchant purchased 400 crates at \$5.25 per crate, 150 crates at \$5.80 per crate and the remainder at \$6.10 per crate. The agent charged Thompson 45¢ per crate commission. Express and other charges amounted to \$34.50. What average total cost per crate, to the nearest whole cent, did Thompson pay for the oranges? [10]
- 5 Using the title and information given below, prepare a bar graph to show the following facts: [To the teacher: Deduct one credit for each error or omission.] [10]

### ANN'S DRESS SHOP

#### Dresses Sold

During the Week Ending March 22, 1958

Monday	27
Tuesday	39
Wednesday	32
Thursday	25
Friday	42
Saturday	56

[3]

<u>\$1500</u>	<u>Albany, N. Y., March 15, 1958</u>
<u>Ninety days after date</u> <u>I</u> promise to pay to the order of	
<u>Joseph Mackin</u>	
<u>One thousand five hundred and 00/100-----DOLLARS</u>	
<u>Value received with interest at the rate of 5% per annum.</u>	
(Signed) <u>Thomas Atwood</u>	

6 On April 20, 1958, Mr. Mackin discounted the above note at the First National Bank. The rate of discount was 6%. What amount did Mr. Mackin receive as net proceeds from discounting this note? [10]

**Part III**

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

7 One year a certain city needed \$2,500,000 to meet its budget. It was estimated that \$860,272 should be raised by fees, special assessments and revenue of various kinds. The remainder was to be raised by property taxes. The assessed value of the property in the city was \$57,900,000. What was the tax rate per \$1000 in this city for that year? [6]

8 Mr. White purchased a city lot for \$850. Taxes on the lot were \$17.50 a year. After 2 years, he sold the lot for \$970. What percent of yield did he earn *annually* on his original investment? [6]

9 Ross works as a carpenter on an 8-hour-per-day basis with time and a half for all time over 8 hours per day. His regular pay rate is \$3.60 per hour. During a recent week, he worked as follows:

Monday .....	8 hours
Tuesday .....	9 hours
Wednesday .....	10 hours
Thursday .....	6 hours
Friday .....	9 hours

Total deductions from his pay amounted to \$31.56. What amount of money did he receive as take-home pay for the week, after all deductions had been made? [6]

10 Jacobs insured his store building valued at \$48,000 for \$32,000 under a policy containing an 80% coinsurance clause. A fire loss of \$16,800 occurred. How much should Jacobs collect from the insurance company? [6]

11 Berkowitz dictated 15 letters to his secretary in 3 hours. The secretary spent a total of 6 hours taking the dictation and typing the letters. Berkowitz's salary was \$20 a day for 8 hours; his secretary's salary was \$12 a day for 8 hours. Other expenses involved averaged 10 cents per letter. What was the average total cost per letter to the company? [6]

Part IV

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

- 12 Miss Lee, a cashier at a summer theater, had the following money in the cash box of the ticket-selling window at the start of a particular working day: 2 five-dollar bills, 10 one-dollar bills, 15 half dollars, 42 quarters, 55 dimes, 90 nickels. At the close of the day when she was proving her day's cash receipts, she found that she had sold 179 adults' tickets at 60¢ each and 57 children's tickets at 30¢ each.
- How much money should Miss Lee have in the cash box at the conclusion of this day? [4]
- 13 A dress that cost \$4.50 has been selling for \$7.50 at the rate of 12 dresses per day. During a special sale, the price was reduced to \$6.50, and sales increased to 20 dresses per day. Did the daily profit increase or decrease, and how much? [4]
- 14 Hudson went into bankruptcy, owing a total of \$92,800. The net cash distributed to his creditors was \$21,344. What amount of money was paid to a creditor with a claim of \$11,600? [4]
- 15 Smith and Howard formed a partnership in January 1957 with investments of \$18,000 and \$12,000, respectively. The partnership agreement provided that the annual net profit was to be divided in proportion to their investments. The partnership's net profit for the year was \$9055.60. What was the amount of Mr. Smith's share of the net profit? [4]
- 16 On April 1, 1958, John Martin's checkbook balance was \$776.94. His bank statement showed a balance of \$1104.11. Checks were outstanding for \$22.60; \$61.98; \$82.59. A deposit of \$160 had been omitted from the checkbook by mistake. Prepare a reconciliation statement and indicate the correct available checkbook or bank balance. [4]