

The University of the State of New York  
REGENTS HIGH SCHOOL EXAMINATION  
**BUSINESS ARITHMETIC**  
Tuesday, June 21, 1960 — 1:15 to 4:15 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**

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1 a Subtract: [1]

\$731.00  
297.41

b Make the following extensions: [4]

400 gallons at  $2\frac{1}{2}$  cents per gallon = \$.....

12 quarts at 40 cents per quart = \$.....

1,000 pounds at \$45 per ton = \$.....

2,500 cards at \$42 per M = \$.....

c Complete *each* of the following: [5]

17.2% expressed as a decimal is .....

72 increased by  $12\frac{1}{2}$ % of itself is .....

.8725 multiplied by 1,000 is .....

80 is  $\frac{3}{4}$  of what number? .....

$\frac{1}{4}$ % of \$400 is \$.....

d Underscore the correct answer for *each* of the following: [5]

5% of 2,980 is approximately (75; 90; 150; 300).

At \$1.25 per pound, how many pounds can be purchased for \$12.50? (8; 10; 15; 20)

If an article marked at \$48 is sold for \$40, the percent of discount given is  
(25%; 20%;  $16\frac{2}{3}$ %;  $12\frac{1}{2}$ %).

The correct number of days from April 25, 1960, to June 4, 1960, is (9; 29; 39; 40).

The charge for 4 ounces of candy sold at \$1.20 per pound should be (20¢; 30¢; 40¢; 60¢).

e Compute the interest: [5]

\$500 for 4 months at 6% = \$.....

\$60 for 113 days at 6% = \$.....

\$1,500 for 1 year at 4% = \$.....

\$1,000 for 60 days at  $4\frac{1}{2}$ % = \$.....

\$400 for 90 days at 3% = \$.....

# BUSINESS ARITHMETIC

Tuesday, June 21, 1960

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

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

This page must be detached and handed in with the answer paper.

## Part II

Answer any four questions from this part. Unless otherwise directed, all work must be shown.

2 Answer all parts of this question. Write each answer in the space provided on the question paper. Answers only are required. [10]

a If an invoice for \$720 dated April 3, 1960, terms  $\frac{8}{10}, \frac{2}{20}, \frac{N}{60}$ , is paid on April 13, 1960, what should be the amount of the check? a.....

b What single rate of discount is equivalent to 30% and 10%? b.....

c An insolvent debtor, after liquidating his assets, was able to pay \$128 to one of his creditors. This amount represented 32% of the original account. How much was the original account? c.....

d If an electric meter read 17,628 kilowatt hours on May 1, and one month later it read 18,124 kilowatt hours, how much would the electric bill be at an average cost of  $3\frac{1}{2}$  cents per kilowatt hour? d.....

e A car purchased in 1954 for \$4,200 has a resale value 5 years later of \$400. What was the average amount of depreciation per year for this car during the five-year period of ownership? e.....

3 Answer all parts of this question. Write each answer in the space provided on the question paper. [This is an accuracy test. One credit for each correct answer; no partial credit. Wherever necessary, reduce the answer to simplest form. Answers only are required.] [10]

a Add 1.684; 37.09; 423.213; .9275 a.....

b Divide 25.7420 by 3.05 b.....

c Multiply 12.5 by .35 c.....

d Multiply  $9\frac{1}{4}$  by  $4\frac{2}{3}$  d.....

e Subtract 3 quarts, 1 pint from 3 gallons e.....

f Add  $3\frac{1}{4}$ ;  $17\frac{2}{3}$ ;  $9\frac{1}{8}$  f.....

g Express  $\frac{7}{8}$  as a percent to the nearest tenth of a percent g.....

h Divide  $2\frac{2}{3}$  by  $1\frac{1}{3}$  h.....

i Find 130% of 842 i.....

j Subtract  $8\frac{5}{8}$  from  $14\frac{2}{3}$  j.....

4 Mr. Jones, an employee of Robinson & Haitz Co., is employed on a 40-hour-week basis, with time and one-half for overtime. The regular rate paid this employee is \$3.20 per hour. During the week of January 4 Jones worked 46 hours. The following deductions were made from his gross pay: 3% for FICA (Social Security), \$21 for federal withholding tax, \$.30 for disability benefits insurance, \$4 for New York State withholding tax and \$1 for Community Chest contribution. What will be the take-home pay for Mr. Jones? [10]

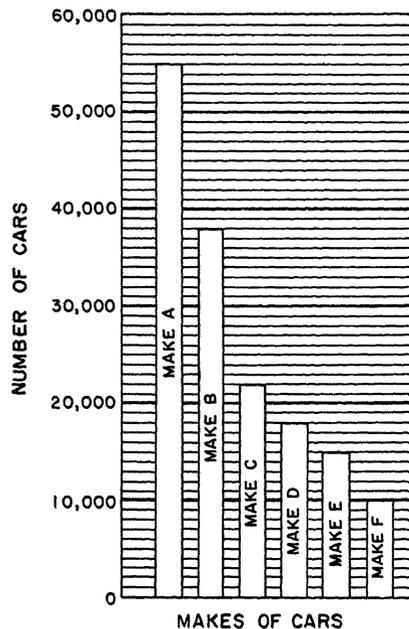
5 Mr. Lown, Mr. Knox and Mr. James are partners in a retail store, with capital investments of \$15,000, \$10,000 and \$5,000, respectively. The partnership agreement provides for the net profit to be divided as follows: 6% interest to be paid to each partner on invested capital and the remainder of the profit to be divided equally. The sales for the year were \$204,000, the cost of goods sold was \$150,000 and the expense of doing business was \$29,400. Determine the amount of net profit. [2] How much did each partner receive as his share of the net profit? [8]

6 Answer the following questions by referring to the accompanying graph.

- a How many Make A cars were registered during the period covered by the graph? [1]
- b How many more Make B cars than Make C cars were registered during this period? [2]
- c As shown on this graph, what was the total number of new foreign cars registered during this period? [2]
- d If the cost of one Make E car was \$1,700, what was the total cost of the Make E cars registered during this period? [2]
- e What percent of the total new foreign car registrations shown on the graph were Make A? [Express your answer in the nearest whole percent.] [3]

**NEW FOREIGN CAR REGISTRATIONS**

January 1 — June 30, 1959  
(First six months)



**Part III**

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

- 7 Hunt can purchase a stove from Company *A* for \$325 less 20% and 15% plus a delivery charge of \$5, or he can purchase the same type of stove from Company *B* for the same list price less 30% delivered. How much would be saved by taking the better offer? [6]
- 8 Mr. Reardon purchased a television set from a local dealer for \$350 with a down payment of \$50. Interest at the rate of 6% is added to the original unpaid balance, plus a carrying charge of \$3. The total amount due will be paid in 12 equal monthly payments. What will be the amount of each payment? [6]
- 9 Mr. Stanton's State income tax return for last year showed a total income for the year of \$5,286. He was entitled to deduct the following items before determining his tax liability:
- |  |         |
|--|---------|
| Family allowance — self, wife and one child<br>at \$600 each, totaling | \$1,800 |
| Real estate taxes  | 384     |
| Interest on debts  | 68      |
| Contributions to charity   | 165     |

His taxable income was subject to a tax of 2% on the first \$1,000 and 3% on the next \$2,000 or any fraction thereof. What was the total of Mr. Stanton's State income tax? [6]

- 10 On May 31, 1960, Mr. Albert Cook's checkbook balance was \$326. On the same date his bank statement showed a balance of \$568. The following checks were outstanding: \$110, \$23.50 and \$19.50. It was also discovered that a deposit for \$91.50 had not been entered in the checkbook. The bank had deducted a service charge of \$2.50 for which a voucher was enclosed with the canceled checks. Prepare a reconciliation statement and indicate the correct available balance. [6]
- 11 Mr. Goade discounted his customer's 90-day noninterest-bearing note for \$690 at the bank. The note was dated April 6, 1960, and discounted May 26, 1960, at 6%. Find the net proceeds of the note. [6]

**Part IV**

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

- 12 In a county having a 3% sales tax, a wearing apparel store had cash register readings totaling \$18,540, which included the sales tax, for the first quarter of 1960. What was the amount of the sales tax for this store for the period indicated? [2] Prove your answer. [2]
- 13 Mr. Smith pays his salesclerks a weekly salary of \$42 plus a bonus of 2% on all sales over \$300. What must be the total sales for a clerk to receive a salary of \$53? [4]
- 14 A building insured for \$28,000 had a fire loss of \$7,700. This building was insured by the White Insurance Company for \$16,000 and by the Temple Insurance Company for \$12,000. How much will be paid by the Temple Insurance Company to the owners of the building as its share of the fire loss? [4]
- 15 In a certain community a residence valued at \$20,000 is assessed at 42% of its value. The tax rate in this community is \$42.75 per \$1,000 of assessed value. How much will the owner of this property be expected to pay as a real estate tax on this residence? [4]
- 16 The September 1959 registration in typing in a school was 184 pupils. This represents a decrease of 8% from the September 1958 registration in typing in the same school. What was the September 1958 registration in typing? [4]

# FOR TEACHERS ONLY

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## INSTRUCTIONS FOR RATING BUSINESS ARITHMETIC

Tuesday, June 21, 1960 — 1:15 to 4:15 p.m., only

Use only *red* ink or pencil in rating Regents papers. Do not attempt to *correct* the pupil's work by making insertions or changes of any kind. Use checkmarks to indicate pupil errors.

### Part I — Rapid Calculation Test

1 Allow a total of 20 credits as indicated: [Allow no partial credit.]

a \$433.59 [1]

b \$ 10.00 [1]

\$ 4.80 [1]

\$ 22.50 [1]

\$105.00 [1]

c .172 [1]

81 [1]

872.5 (or  $872\frac{1}{2}$ ) [1]

60 [1]

\$1.00 [1]

d 150 [1]

10 [1]

$16\frac{2}{3}\%$  [1]

40 [1]

30¢ [1]

e \$10.00 [1]

\$ 1.13 [1]

\$60.00 [1]

\$ 7.50 [1]

\$ 3.00 [1]

### Part II

2 Allow a total of 10 credits, two credits for each correct answer. [Allow no partial credit.]

a \$662.40

d \$ 17.36

b 37%

e \$760.00

c \$400.00

3 Allow a total of 10 credits, one credit for each correct answer. [Allow no partial credit.]

a 462.9145

f  $29\frac{31}{40}$

b 8.44

g 28.6%

c 4.375

h  $1\frac{4}{5}$

d  $43\frac{1}{8}$

i 1094.6 (or  $1094\frac{4}{5}$ )

e 2 gallons, 1 pint

j  $5\frac{31}{40}$

[OVER]

BUSINESS ARITHMETIC — *concluded*

- 4 \$125.80 [10]\*
- 5 \$24,600 Net Profit [2]  
 \$ 8,500 Mr. Lown }  
 \$ 8,200 Mr. Knox } [8]\*  
 \$ 7,900 Mr. James }
- 6 a 55,000 [1]  
 b 16,000 [2]  
 c 158,000 [2]  
 d \$25,500,000 [2]  
 e 35% [3]

**Part III**

Allow 6 credits for each of four correct answers.

- 7 \$1.50\*
- 8 \$26.75\*
- 9 \$76.07\*
- 10 Reconciliation will depend upon method used.  
 Correct available balance is \$415.\*
- 11 \$685.40\*

**Part IV**

Allow 4 credits for each of four correct answers.

- 12 \$540 sales tax [2]  
 $\$18,000 \times .03 = \$540$  [2]
- 13 \$850\*
- 14 \$3,300\*
- 15 \$359.10\*
- 16 200\*

\*Unless otherwise directed, in parts II, III and IV of this examination partial credit may be allowed on questions to which *four* or more credits are assigned. [See pamphlet entitled *Suggestions on the Conducting of Examinations and the Rating of Regents Examination Papers in Business Subjects.*]