

The University of the State of New York
REGENTS HIGH SCHOOL EXAMINATION
BUSINESS ARITHMETIC
Thursday, August 20, 1959—12 m. to 3 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 Subtract [2]

$$\begin{array}{r} 785 \\ 13\frac{1}{2} \\ \hline \end{array}$$

b Make the following extensions: [4]

420 gallons at 25 cents per gallon = \$_____

30 quarts at 60 cents per quart = \$_____

3000 pounds at \$22 per ton = \$_____

80 bushels at \$1.25 per bushel = \$_____

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

42% expressed as a fraction in lowest terms is _____

400 increased by $12\frac{1}{2}\%$ of itself is _____

.04825 multiplied by \$1000 is _____

24 is $\frac{2}{3}$ of _____

$\frac{1}{2}\%$ of \$940 is _____

d Compute the interest: [4]

\$240 for 3 months at 6% \$_____

\$ 60 for 137 days at 6% \$_____

\$250 for 1 year at 4% \$_____

\$ 80 for 75 days at 3% \$_____

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

The exact number of days from August 20, 1959, to October 9, 1959, is (48; 49; 50; 51).

120% of \$25 is (\$5; \$30; \$31.25; \$36).

1% of \$830 is (\$83; \$.83; \$830; \$8.30).

At 30 cents per pound, how many pounds can be purchased for \$12? (36; 40; 60; 80)

A tax rate of \$4.185 per \$100 expressed as a rate per \$1000 would be (\$.04185; \$.4185; \$41.85; \$418.50).

[2]

BUSINESS ARITHMETIC

Thursday, August 20, 1959 — 12 m. to 3 p.m., only

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. [10]
- a An invoice for \$800 dated April 15, 1959, terms $\frac{2}{10}, \frac{1}{30}, \frac{N}{60}$ was paid by check on May 1, 1959. What should have been the amount of the check?
 - b An insurance policy for a three-year term was issued to Mr. Jones on his residence for \$15,000 at the rate of 60 cents per \$100. What was the average annual cost of this policy?
 - c A map has a scale of 50 miles to the inch. How many miles separate one city from another if the distance on the map measures $4\frac{1}{2}$ inches?
 - d Mr. Clarke sold 60% of his business for \$18,000. At that rate, what was the original value of the business?
 - e An office machine which cost \$780 had a trade-in value of \$240 after 9 years of use. What was the average annual depreciation?
- 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 its simplest form.] [10]
- a Add $6\frac{1}{3}$; $15\frac{1}{2}$; $7\frac{1}{4}$
 - b Multiply 14.2 by 7.08
 - c Divide 24.75 by .25
 - d Add 4.2; .055; 18.75; 124.337
 - e Subtract $4\frac{7}{8}$ from $23\frac{3}{4}$
 - f Multiply $14\frac{2}{7}$ by $7\frac{1}{2}$
 - g Change 4 gallons 3 quarts 1 pint to pints
 - h Express $\$9\frac{2}{3}$ as it should appear according to good business practice
 - i Express $1\frac{1}{3}$ as a percent
 - j Divide $5\frac{1}{2}$ by $\frac{1}{4}$
- 4 Dalton, an appliance dealer, bought an electric range for \$142.50 and in addition paid \$2.52 freight on the range. His operating expense amounted to 25% of sales. At what price should he sell the range in order to make a net profit of 15% of the selling price? [10]
- 5 Mr. Forster can purchase an air conditioner for his store from an out-of-town firm for \$1700 less 10% and 10%, plus freight and installation charges totaling \$75. A local firm offers similar equipment completely installed for \$1800 less 15% and 10%, terms $\frac{2}{10}, \frac{N}{30}$. If Mr. Forster is prepared to pay cash, how much will be saved by taking advantage of the better offer? [10]
- 6 Scott, Bean and Banker invested \$10,000, \$15,000 and \$25,000, respectively, in a partnership venture. The partnership agreement provides that profits are to be shared as follows: "Each partner is to receive 6% interest on his investment; the remaining profit is to be divided equally." The profit for the year 1958 was \$18,000. How much would *each* partner receive as his total share of the profit? [10]

BUSINESS ARITHMETIC — *concluded*

Part III

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

- 7 Laura Carpenter is employed as a sales clerk with a base salary of \$47.50 per week. In addition, she receives $1\frac{1}{2}\%$ on all sales over \$500. What would be her total earnings in a week in which she sold merchandise totaling \$1752? [6]
- 8 A certain stock quoted at 88 pays a dividend of 6% annually. This stock has a par value of \$100 per share. How much money should be invested in this stock in order to obtain a yearly income of \$2100? [Disregard brokerage and transfer taxes.] [6]
- 9 Mr. Boyd purchased a car from Smith Motors for \$2800. He agreed to pay \$1000 down and the balance in 18 monthly payments. The finance charges on the transaction amounted to \$180. What was the amount of each monthly payment? [6]
- 10 Mr. Toombs deposited \$400 in a savings bank January 2, 1957. The bank adds interest to its depositors' accounts quarterly at the rate of 4% per year. With no added deposits or withdrawals, how much did Mr. Toombs have in his account on January 2, 1958? [6]
- 11 On June 30, 1959, Mr. Raymond Clay's bank statement showed a balance of \$360.70. His checkbook balance on that date was \$305.23. Upon comparing the checkbook with the returned checks, he discovered that the following checks were outstanding: \$14.82; \$21.41; \$20. He also discovered a service charge of \$.76 on the bank statement. Prepare a reconciliation statement and indicate the correct available balance. [6]

Part IV

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

- 12 Mrs. Jones purchased a refrigerator in a county having a 3% sales tax. The total cost of the purchase, including the sales tax, amounted to \$412. What was the amount of sales tax on Mrs. Jones' purchase? [2] Show proof of your answer. [2]
- 13 The Ace Manufacturing Machine Company was adjudged a bankrupt organization. At that time the assets, consisting entirely of cash, amounted to \$1365 and the liabilities amounted to \$6500. How much could a creditor expect to receive on each dollar owed by the bankrupt company? [4]
- 14 The real estate tax rate in a certain village amounted to \$3.1385 per \$100 of assessment. According to this rate, how much would the tax be on a piece of property in this village assessed at \$14,780? [4]
- 15 John Cooper discounted his 90-day noninterest-bearing note at the bank today. The rate of discount was 6%. If the face of the note was \$876, what was the amount of the net proceeds? [4]
- 16 The Capital Gas Company charges 65 cents per M cubic feet of gas consumed. Find the amount of Mr. Johnson's gas bill for July, if at the beginning of the month the gas meter reading was 36,000 cubic feet and at the end of the month the meter reading was 41,000 cubic feet. [4]

FOR TEACHERS ONLY

BA

INSTRUCTIONS FOR RATING BUSINESS ARITHMETIC

Thursday, August 20, 1959 — 12 m. to 3 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 check marks to indicate pupil errors.

Part I — Rapid Calculation Test

1 Allow a total of 20 credits as indicated:

a $771\frac{1}{2}$ [2]

b \$105 [1]

\$ 18 [1]

\$ 33 [1]

\$100 [1]

c $\frac{21}{50}$ [1]

450 [1]

\$48.25 [1]

36 [1]

\$4.70 [1]

d \$3.60 [1]

\$1.37 [1]

\$10.00 [1]

\$.50 [1]

e 50 [1]

\$30 [1]

\$8.30 [1]

40 [1]

\$41.85 [1]

Part II

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

a \$792

b \$30

c 225 miles

d \$30,000

e \$60

[OVER]

BUSINESS ARITHMETIC — *concluded*

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

- a $29\frac{1}{2}$
- b 100.536
- c 99
- d 147.342
- e $18\frac{7}{8}$
- f $107\frac{1}{4}$
- g 39 pts.
- h \$9.67
- i 120%
- j 22

4 \$241.70 [10]*

5 \$102.54 (local firm) [10]*

6 \$5,600 Scott
\$5,900 Bean
\$6,500 Barker [10]*

Part III

Allow 6 credits for each of four correct answers.

7 \$66.28*

8 \$30,800*

9 \$110*

10 \$416.24*

11 Reconciliation will depend upon method used.
\$304.47 is correct available checkbook or bank balance.*

Part IV

Allow 4 credits for each of four correct answers.

12 a \$12.00 [2]

b $\$400 \times .03 = \12.00 [2]

13 21¢*

14 \$463.87*

15 \$862.86*

16 \$3.25*

*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.*]