

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

BUSINESS ARITHMETIC

Tuesday, August 21, 1962 — 12:30 to 3:30 p.m., only

Fill in the following lines:

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

Name of teacher

Instructions for Part I

Do not open this sheet until the signal is given.

All parts of the mental 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
MENTAL CALCULATION TEST

- 1 *Directions (a-g):* Complete *each* of the following on the line at the right: [7]
- a Subtract $81\frac{3}{4}$ from 112. a.
 - b Divide: 13.80 by .6 b.
 - c What is the sum of 7 pounds 9 ounces and 4 pounds 10 ounces, expressed in simplest form? c.
 - d What would be the cost of 550 pounds of coal at \$2 per cwt.? d.
 - e What is the cost of 3,500 envelopes at \$8 per M? e.
 - f On a bar graph, a line one inch long represents \$500. What amount of money would be represented on this graph by a line $6\frac{1}{2}$ inches long? f.
 - g Change 81 feet to yards. g.

Directions (h-k): Write the correct answer to *each* of the following in the space provided at the right: [4]

- h A decimal tax rate of .02875 expressed as dollars per \$1,000 would be (\$.29; \$2.88; \$28.75; \$287.50) h.
- i The exact number of days from November 20, 1961, to January 18, 1962, is (28; 59; 60; 61) i.
- j 150 less 20% is (20; 30; 120; 180) j.
- k A chair originally marked at \$75 was sold for \$60. The percent of discount given was (15%; 20%; 25%; 80%) k.

Directions (l-p): Compute the interest on *each* of the following: [5]

- l What is the interest on \$750 for 30 days at 6%? l.
- m What is the interest on \$5,900 for 6 days at 6%? m.
- n What is the interest on \$600 for 47 days at 6%? n.
- o What is the interest on \$950 for 60 days at 3%? o.
- p What is the interest on \$1,500 for 60 days at 2%? p.
- q Complete the following sales summary by writing the seven entries in the table below: [Allow no partial credit.] [4]

Jackson Company
Sales Summary for a Two-Week Period

Salesman	March 12-17	March 19-24	Totals
Atkins, Earl	\$ 227	\$ 1,040	\$.
Foster, Robert	2,118	1,096
Ginter, Philip	723	831
Haynes, William	1,114	1,021
Totals	\$.	\$.	\$.

BUSINESS ARITHMETIC

Tuesday, August 21, 1962

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

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

The remaining sheets of this question paper should be handed in at the close of the examination.

Part II

Answer all parts of this question.

2 Solve each of the following questions on your answer paper; write only your answer in the space provided on the question paper. [2 credits each. No partial credit.] [40]

a Add $42\frac{3}{8}$; $9\frac{1}{2}$; $72\frac{3}{16}$; $23\frac{1}{4}$. a.....

b Multiply 74.50 by 23.25. b.....

c Divide $31\frac{1}{2}$ by $5\frac{1}{5}$. c.....

d An invoice is dated March 27 with terms $\frac{3}{10}$, $\frac{2}{30}$, $N/60$. In order to take advantage of the 3% cash discount, on or before what date must the invoice be paid? d.....

e On July 10, Jones borrowed money from his bank and signed a 120-day promissory note. On what date was the note due? e.....

f By borrowing \$768 for 30 days at 5% interest, Mr. Fellows obtained a \$32.00 cash discount on an invoice. What net amount did he save by borrowing the money and taking the cash discount? f.....

g For a 6-month period a student received \$6 as interest on his savings account of \$300. What annual percent of interest did this savings bank pay him? g.....

h An article listed at \$50 is now being sold with a 20% discount. What additional rate of discount must be offered in order to reduce the selling price to \$36? h.....

i An invoice for \$380, dated May 1, has terms of $\frac{2}{10}$, $\frac{2}{30}$, $N/60$. What sum of money will be needed to pay this bill on May 31? i.....

- j* A salesman receives a 5% commission on his weekly sales. In order to receive \$95 as commissions in a week, what should be the amount of his sales? *j*.....
- k* It cost \$5.60 to manufacture a pair of shoes. At what price must these shoes be sold to make a gross profit of 25% based on their cost? *k*.....
- l* A retailer purchased dolls for \$5.10 each. The dolls sell for \$8.50 each. What is his percent of markup on each doll based on the selling price? *l*.....
- m* A salesclerk in a store is paid a weekly salary of \$30, plus a commission of 12% on all his sales. His sales for a recent week amounted to \$350. What total amount of money did this clerk earn from salary and commission that week? *m*.....
- n* An agent sold goods for \$1,650. If he charged his employer a 7% commission, what amount of money did the agent earn for his work? *n*.....
- o* Roberts signed a 90-day promissory note with his bank for \$480. The bank deducted 5% interest as discount. What was the amount of the net proceeds of his note? *o*.....
- p* New York State has a personal income tax of 2% on the first \$1,000 of taxable income and 3% on the next \$2,000 of taxable income or any fraction thereof. A person has a taxable income of \$2,700. What would be the amount of his income tax? *p*.....
- q* Atlas and Butelle are partners in a firm with investments of \$15,000 and \$5,000, respectively. Profits of the firm are shared in proportion to the partners' investments. The firm's profit last year was \$5,600. What amount of money should Atlas have received as his share? *q*.....
- r* On January 1, the electric meter in the production department of the Ampco Manufacturing Company had a reading of 17,442 kilowatt-hours. On February 1 the meter had a reading of 18,250 kilowatt-hours. If the average cost of electricity was $3\frac{1}{2}$ cents per kilowatt-hour, what was the expense for electricity in the production department for January? *r*.....
- s* An investor purchased stock for \$120 per share, including brokerage and other expenses. If he received an annual dividend of \$6 per share, what annual percent of return did he receive on his investment? *s*.....
- t* Mr. Oles had been renting a house for \$95 a month before he purchased it for his home. The total cost of owning his own home the first year was \$1,080.75. What was the difference in the cost of renting and owning this home for the first year? *t*.....

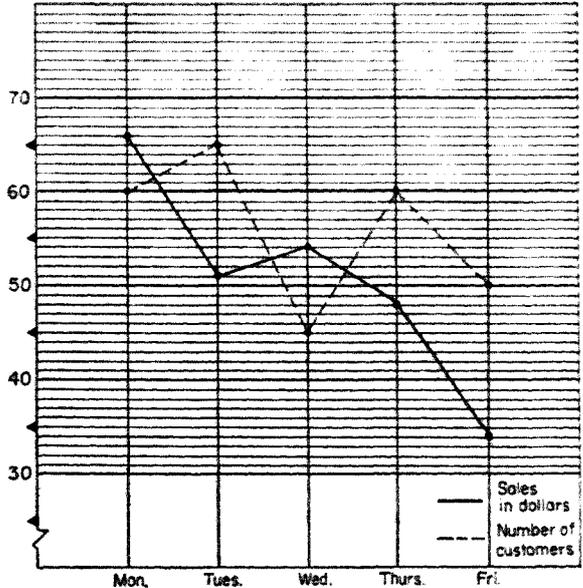
Part III

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

MAYWOOD RESTAURANT
Lunch Sales
for
Week of March 19, 1962

3 Referring to the graph of the Maywood Restaurant for the week of March 19, 1962, answer the following questions:

- a How many more customers were served by this restaurant on Monday than on Friday? [2]
- b What were the total sales in dollars for the Maywood Restaurant during the week of March 19? [2]
- c What was the average amount spent per customer for lunch on Monday? [2]



- 4 On March 31, Mr. Wooden's bank statement showed a balance of \$327.97. His checkbook balance for that date was \$345.97. A deposit for \$56.20 on March 31 had not been recorded yet by the bank, and the following checks were outstanding: \$17.50; \$6.80; \$14.25. In addition, a service charge of \$.35 had been made during the month by the bank. Prepare a reconciliation statement and indicate the correct available checkbook or bank balance. [6]
- 5 A refrigerator is advertised for \$250 less 20% and 10%. A refrigerator of similar quality is advertised by another dealer for \$280 less 25% and 15%. How much money will be saved by buying the less expensive of the two refrigerators? [6]

6 Following is a portion of a table used by employers for determining the amount of the tax to be deducted from employees' wages for Social Security benefits:

Social Security Employee Tax Table Table of $3\frac{1}{2}$ Percent Employee Tax Deductions					
Wages		Social Security Tax to be withheld	Wages		Social Security Tax to be withheld
At least	But less than		At least	But less than	
\$62.24	\$62.56	\$1.95	\$63.84	\$64.16	\$2.00
62.56	62.88	1.96	64.16	64.48	2.01
62.88	63.20	1.97	64.48	64.80	2.02
63.20	63.52	1.98	64.80	65.12	2.03
63.52	63.84	1.99	65.12	65.44	2.04

- a Based on the above table, what amount of tax would be withheld from the wages of an employee who, during the first week in January 1962, earned \$63.25? [2]
- b Based on the above table, what amount of tax would be withheld from the wages of an employee who, during the first week of January 1962, earned \$64.80? [2]
- c The Social Security Act also requires most employers to contribute to the fund an amount equal to that contributed by their employees. If the wages paid by the Foster Company during the quarter of the year ended March 31 totaled \$41,320, and the tax rate was $3\frac{1}{2}\%$, what amount was the company required to contribute to the fund? [2]

7 The Arnold Company bought a machine for \$7,600. After using it for four years, the company bought a new machine for \$12,000 by trading in the old machine and paying \$7,200 in cash. What was the amount of the average annual depreciation of the old machine? [6]

Part IV

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

- 8 The rate for a 1-year fire insurance policy is \$.56 per \$100. The rate for a 3-year policy is 2.7 times the rate for a 1-year policy. A 3-year policy for \$15,000 was purchased. How much money was saved by buying the 3-year policy instead of three separate 1-year policies? [4]
- 9 In the partnership of Hayes, Case and Albright, with investments of \$7,000, \$9,000 and \$15,000, respectively, the partners agreed that each was to receive 7% interest on his investment, and that the remaining net profit was to be shared equally. The net profit for the year was \$18,550. What amount of money did Albright receive as his share of the profit? [4]
- 10 Mr. Arthur has the opportunity to purchase a used car for \$1,860 cash. If he buys this car on the installment plan, he will pay \$576.60 as a down payment and the remainder in equal monthly installments of \$81.50 per month for 18 months. By what amount of money does the installment price exceed the cash price? [4]
- 11 Halladay owns a house and lot with an assessed valuation of \$8,400, which is 40% of its actual value.
- a The tax rate on the above property is \$42 per \$1,000 of assessed valuation. What is the amount of the property taxes? [2]
- b What is the actual value of Halladay's house and lot? [2]
- 12 The total sales made by a furniture store last month amounted to \$16,320. The cost of the goods sold was \$11,285. The store's operating expenses for that month were \$2,170. What was the amount of net profit? [4]

