

BUSINESS ARITHMETIC

Tuesday, June 21, 1938

NAME OF SCHOOL

NAME OF CANDIDATE

Fill above blanks before signal to begin work is given by examiner.

Do not open this sheet till the signal is given.

Examiner will place this sheet closed on desk of each candidate. Candidate will open the sheet and begin work at signal from examiner. All parts of this test are to be worked mentally and the results placed on the sheet. At the end of 15 minutes work must stop and the pages used for this test must then be detached from the rest of the question paper and immediately collected.

All work must be done with pen and ink.

BUSINESS ARITHMETIC RAPID CALCULATION TEST

Tuesday, June 21, 1938 — 9.15 a. m. to 12.15 p. m.

- 1-2 a Make the extensions: [4]
- 144 yd @ $33\frac{1}{3}\phi$ =
 - 120 lb @ $7\frac{1}{2}\phi$ =
 - 50 bu. @ \$1.25 =
 - 64 doz. @ $37\frac{1}{2}\phi$ =
- b Compute the interest on *each* of the following: [4]
- \$ 300 for 84 days at 6 % =
 - \$1200 for 25 days at 6 % =
 - \$ 480 for 30 days at 4 % =
 - \$ 64 for 15 days at $4\frac{1}{2}\%$ =

c Complete the following record of packages delivered: [4]

	Route 1	Route 2	Total
Monday	105	69	
Tuesday	98	134	
Wednesday	57	88	
Thursday	124	107	
Friday	218	175	
Saturday	170	93	
Total			

- d Complete *each* of the following: [8]
- $\frac{2}{3}\%$ of \$450 is
 - A tax rate of \$9.50 per \$1000 is equivalent to \$...... per \$1.
 - The exact number of days from March 11, 1938 to June 9, 1938 is
 - 150 divided by 7.5 is
 - 24 increased by $16\frac{2}{3}\%$ of itself is
 - .025 is equivalent to %
 - A chair that cost \$20 was sold for \$30; the rate of gain on the selling price was
 - A lamp that cost \$16 was sold for \$24; the rate of gain on the cost was

BUSINESS ARITHMETIC

Tuesday, June 21, 1938—9.15 a. m. to 12.15 p. m., only

Write at top of first page of answer paper (a) name of school where you have studied, (b) number of weeks and recitations a week in business arithmetic.

The minimum time requirement is five recitations a week for a school year.

Answer questions 1-2 and eight of the others. Unless otherwise stated all operations except mental ones are to be shown. Practical business methods must be used in solutions.

1-2 Rapid calculation test on attached sheet. [20]

3 Answer all parts of this question. [10] [Deduct 2 credits for each incorrect answer. Answers only are required in this question.]

- a The discount at 4% on an invoice of goods is \$16. What is the net cost?
- b A man bought an automobile for \$845. Five years later he was allowed \$225 for it toward the purchase of a new car. What was the average annual depreciation?
- c Find the single discount which is equivalent to a series of discounts of 20% and 5%.
- d A bedroom suite that had been selling at \$300 was offered during a special sale for \$250. What rate of discount was allowed?
- e The May reading of a gas meter was 45,600 cubic feet and the April reading was 42,800 cubic feet. At \$.90 per thousand cubic feet, find the amount of the gas bill.

4 John Harper bought an invoice of goods for \$3650, less 10% and 5%, on terms $\frac{2}{10} \text{ n}/\frac{60}{60}$. In order to take advantage of the cash discount, Harper borrowed the sum needed from Smith, agreeing to repay him in 50 days with 6% interest. How much did Harper gain by borrowing the money? [10]

5 A shoe store proprietor buys shoes at \$7 a pair. He desires to make a profit of 20% on the selling price after offering a discount of $12\frac{1}{2}\%$ on the marked price. At what price must each pair be marked? [10]

6 While a certain lace curtain was selling at \$3 a pair, a store sold an average of 10 pairs a day. By reducing the price to \$2.50, the store increased its sales to 20 pairs a day with no increase in total selling expense. The curtains cost \$1.75 a pair.

- a What was the amount of increase or decrease in the daily profit? [8]
- b What was the per cent of increase or decrease in the daily profit? [2]

7 The taxable property in a city is assessed at \$31,406,800. The total amount necessary to meet the expenses of the school system for the coming year is \$502,700. It is estimated that \$230,400 will be received from the state and \$18,200 will be received from other sources.

- a Find the tax rate per \$1000. [Carry the decimal to five places.] [6]
- b What tax should Mr Carter pay if his property is valued at \$9000 and is assessed at 80% of its value? [4]

8 On June 1, 1937, Kennedy, Lane and Allen entered into partnership. Kennedy invested \$5000, Lane \$7500 and Allen \$10,000. It was agreed that each partner should receive 6% annually on his investment and that the remaining profit should be divided equally among the partners. At the end of the year, the gross profit on sales amounted to \$8690 and other income \$735. The expenses for the year amounted to \$2525.

- a Find the firm's net profit for the year. [1]
- b Find Kennedy's total income for the year. [3]
- c Find Lane's total income for the year. [3]
- d Find Allen's total income for the year. [3]

9 John Miller, a salesman, receives a monthly salary of \$90 and a 5% commission on all sales. In addition, he receives a commission of 2% on sales in excess of \$3000 in any single month. His sales in April amounted to \$3850 and in May to \$2700.

- a Find Miller's total commission. [6]
- b Find his average monthly income for the two months. [4]

BUSINESS ARITHMETIC — *concluded*

10 On June 1, James Whitney received his bank statement, which showed a bank balance of \$1032.53. His checkbook balance on that date was \$744.18. The following checks were outstanding: \$82.50, \$20.75, \$145.35. Comparing the statement with the checkbook, Whitney discovered that a canceled check for \$35.85 was not recorded in the checkbook and that he had also failed to enter in his checkbook a deposit of \$75.60.

a Reconcile the balances. [8]

b On the reconciliation statement that you have prepared, indicate clearly the amount that represents the correct checkbook balance. [2]

11 A businessman is paying \$4800 a year rent for the first floor of a store building. He can buy the building for \$60,000. He would then receive a total of \$4000 annually in rent from the other two floors and he would have the following expenses: taxes \$950, insurance \$240, repairs \$500, janitor service \$1200. If money is worth 6% to him in his business, how much would he gain or lose by purchasing the building? [10]

12 On February 1, M. R. King bought 70 shares of stock at $98\frac{1}{2}$, brokerage 22ϕ a share. On April 1 and again on October 1, he received a cash dividend of \$2.50 a share on the stock. On November 1 he sold the stock at $110\frac{1}{4}$, brokerage 24ϕ a share.

a How much did King gain on the sale of this stock? [8]

b How much did King make on the entire transaction? [2]