

COMMERCIAL ARITHMETIC

Tuesday, June 20, 1933

NAME OF SCHOOL

NAME OF CANDIDATE

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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.

# COMMERCIAL ARITHMETIC RAPID CALCULATION TEST

Tuesday, June 20, 1933 — 9.15 a. m. to 12.15 p. m.

1-2 a Complete the following summary of service calls: [5]

	Jones	Williams	Total
January	77	115	
February	58	74	
March	132	117	
April	126	97	
May	89	145	
June	58	69	
Totals			

b Make the extensions: [5]

125 articles @  $28\phi$  =

160 articles @  $7\frac{1}{2}\phi$  =

36 articles @ \$2.50 =

1500 pounds @ \$24 per ton =

250 pounds @ \$4.40 per C =

[Footing not required]

c Find the interest on *each* of the following: [5]

\$210 for 40 days at 6 % =

\$640 for 60 days at  $4\frac{1}{2}\%$  =

\$300 for 38 days at 6 % =

\$150 for 22 days at 6 % =

\$450 for 18 days at 4 % =

[Footing not required]

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

A chair that cost \$15 was sold for \$20; the rate of gain on the selling price was ( $33\frac{1}{3}\%$ ; 20%; 25%)

$\frac{1}{4}$  of 1%, expressed as a decimal, is (.025; .25; .0025; 2.5)

30 divided by 1.5 equals (200; 20; 2; .2)

120 is 25% of (360; 3.6; 480; 4.8)

27 increased by  $33\frac{1}{3}\%$  of itself is (9; 36; 45)

COMMERCIAL ARITHMETIC

Tuesday, June 20, 1933 — 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 commercial 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 In 1929 there were 11,800 passenger busses in operation while in 1930 there were 12,213; find the percentage of increase.
- b An article costing \$5 has been selling for \$6. If the same article can be bought today for \$4, at what price should it be sold to make the same rate of profit on its cost?
- c In a certain village having 1250 inhabitants, \$18,954 was collected in taxes. Find to the nearest mill the amount of tax per inhabitant.
- d A driveway 48 feet long and 9 feet wide is to be covered with a 3-inch layer of crushed stone. How many cubic yards of crushed stone will be needed?
- e The June reading of a gas meter was 53,400 cubic feet while the May reading was 50,800 cubic feet. At \$1.05 per thousand cubic feet, find the amount of the gas bill.

4 H. B. Wilson accepted a position as salesman at a monthly salary of \$110 with a 6% commission on all sales over \$2000 a month. Wilson's sales in March amounted to \$1950, in April \$3250 and in May \$3375.

- a What was the total commission that Wilson was entitled to receive? [6]
- b What was Wilson's average monthly commission for the three months? [2]
- c What was Wilson's total income for the three months? [2]

5 On May 31, William Allen's bank balance was \$1232.15 and his check-book balance \$663.96. Deposits of \$138.70 and \$206.25 were not recorded on the stub of the check book, while the following checks had not been presented for payment: \$76.18, \$17.06, \$130.

- a Reconcile the balances. [8]
- b What is the correct check-book balance? [2]

6 James Clark values his store building at \$12,000 and his stock of goods at \$8500.

- a What amount of insurance must be carried on each if they are insured for 80% of their value? [4]
- b If the rate on the building is 65¢ per \$100 for three years and the rate on the contents is \$1.05 per \$100 for three years, what is Clark's average yearly cost for insurance? [6]

7 A merchant bought a quantity of men's suits for \$3640 subject to 15% trade discount and on terms  $\frac{3}{10} \frac{n}{90}$ . In order to take advantage of the cash discount, he borrowed the money for 80 days at 6% and paid the bill. How much was gained by borrowing the money? [10]

8 Adams owns a house which had been rented for \$45 a month. Brown also owns a house which had been rented for \$45 a month. On May 1, 1932, the tenant in each house moved from the city. Rather than have the property vacant for any length of time, Adams rented his house for \$35 a month, beginning May 1. At first Brown refused to lower the rent on his house but finally rented it for \$38 a month beginning August 1, 1932.

- a For the year ending April 30, 1933, which owner received the greater rent? [2]
- b How much more did he receive than the other? [4]
- c What was Brown's average monthly income for the entire year? [4]

9 a The Rowe Manufacturing Company offered to sell a dining-room suite to a dealer for \$250, less 20%, 10% and 10%. The Wilson Furniture Company offered to sell a dining-room suite of similar quality for \$260, less 40%. Which is the better offer [1]? How much is saved by taking advantage of it [5]?

- b What single discount is equivalent to the series 25%, 20% and 10%? [4]

COMMERCIAL ARITHMETIC — *concluded*

10 An agent received a carload of potatoes containing 37,200 pounds. He paid \$59.45 for freight, \$11.16 for sacks and \$16.50 for labor.

*a* If the agent sold the potatoes for 65¢ a bag, each bag containing 100 pounds, and charged 5% commission, how much should he remit to the owner? [8]

*b* How much a bushel (60 pounds) did the owner receive for his potatoes? [2]

11 A merchant bought rugs at \$27, less 25%. At what price must he mark them to make a profit of 20% on the selling price after allowing an advertised discount of  $33\frac{1}{3}\%$  on the marked price? [10]

12 As briefly as possible, give *one* definite reason or explanation for *each* of the following business practices: [10]

*a* Some firms pay their employees by check.

*b* Not all expenditures on a building are considered as increasing the owner's investment.

*c* The prices in a catalog are often much higher than the actual selling prices.

*d* In some cases, a salesman's rate of commission increases if his sales increase.

*e* The freight rates between two cities on different kinds of merchandise may not be the same.