

COMMERCIAL ARITHMETIC

Tuesday, January 22, 1935

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.

COMMERCIAL ARITHMETIC RAPID CALCULATION TEST

Tuesday, January 22, 1935 — 9.15 a. m. to 12.15 p. m.

1-2 a Complete the following summary of advertising replies: [5]

Newspaper	First week	Second week	Total
A	149	125	
B	86	219	
C	215	77	
D	58	163	
E	123	138	
F	156	117	
Totals			

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

\$50 per ton is equivalent to (5ϕ ; $2\frac{1}{2}\phi$; 50ϕ ; 25ϕ) per pound.

The exact number of days from November 13, 1934 to January 8, 1935 is (52; 56; 57; 71)

A desk that was listed at \$40 was sold for \$30; the rate of discount was (25% ; $33\frac{1}{3}\%$; 10% ; $\frac{1}{4}\%$)

150 is $33\frac{1}{3}\%$ of (50; 200; 4.5; 450)

5% of \$50 is (\$25; \$.25; \$2.50; \$250)

c Make the extensions: [5]

328 bu. @ $\$1.12\frac{1}{2}$ =

30 doz. @ $\$1.25$ =

150 lb @ 17ϕ =

125 yd @ $33\frac{1}{3}\phi$ =

136 lb @ $2\frac{1}{2}\phi$ =

[Footing not required]

d Compute the interest on *each* of the following: [5]

\$ 246 for 50 days at 6 % =

360 for 3 months at 3 % =

134 for 20 days at 6 % =

1260 for 30 days at 5 % =

240 for 27 days at $4\frac{1}{2}\%$ =

[Footing not required]

COMMERCIAL ARITHMETIC

Tuesday, January 22, 1935 — 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 When celery is sold for \$1.80 a crate, which is better for the agent, a commission of 5% or a commission of 5 cents a crate?
- b Men's suits that cost \$18 were sold for \$24. If suits of the same grade cost \$21 today, at what price should they be sold to make the same rate of profit on the selling price?
- c A grocer paid \$650 for a delivery truck. At the end of $4\frac{1}{2}$ years he was allowed \$110 for it toward the purchase of a new truck. What was the average yearly amount of depreciation?
- d A dining-room suite listed at \$180 is billed at \$157.50; what rate of discount is allowed?
- e A concrete floor 4 inches thick is to be laid in the cellar of a house. 36 feet long and 24 feet wide; how many cubic yards of concrete will be needed?

4 On a house and lot there is a 5% mortgage for \$3000, dated August 15, 1932. The interest and \$125 on the principal have been paid every six months.

- a How much has been paid on the principal to date? [4]
- b What will be the total amount due on February 15, 1935, the date of final settlement? [6]

5 Rogers & Blair discounted the following note at the bank on January 22, 1935:

\$2730 00/100

New York, N. Y., November 12, 1934

Four months after date I promise to pay to

the order of Rogers & Blair..... Dollars.
Twenty-seven hundred thirty and 00/100 Dollars.
Value received.

Fred H. Wilson

- a Find the amount that the bank charged for discounting the note. [8]
- b Find the amount that Rogers & Blair received. [2]

6 On January 15, W. F. Watson's check-book balance was \$114.49. On the same date, the monthly statement from the bank showed a balance of \$150.45. The following checks were outstanding: \$8.25, \$28.50, \$16.17. A comparison of the statement with the check book showed that the following items, which were not recorded in the check book, had been paid: a canceled check for \$6.40, a charge of \$1 for banking service and a tax on checks amounting to 56 cents. The amount of one of the canceled checks was \$121 while the amount on the check-book stub was \$112.

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

7 A druggist has been buying a certain face powder at 50 cents a box. In order to increase sales, the wholesaler offered a special advertising discount of 10% and 5% if the druggist would buy one carton (36 boxes) of face powder a month for four months. The druggist accepted the offer and planned for a special sale. At what price per box could the druggist advertise the face powder in order to make $33\frac{1}{3}\%$ on the cost? [10]

8 In the factory of Cole & Davis the working schedule for employees was 40 hours per week. In cases of emergency when overtime was necessary, time and a half was allowed.

- a During the month of December, Hoyt worked 40 hours the first week, 36 hours the second week, 46 hours the third week and 39 hours the fourth week. His regular hour rate was 65 cents. Find Hoyt's average weekly wage for the month of December. [8]
- b Beginning in January, Cole & Davis reduced the time schedule from 40 hours to 36 hours a week and increased the hour rate so that the weekly wages remained the same. What would be Brown's new hour rate if he had been receiving 60 cents? [2] [OVER]

9 A dealer receives notice from the manufacturer that the price of stoves has been advanced. The manufacturer's new price on model B-18 stove is \$40, less 20% and 10%. At what price must the dealer mark this stove to make a profit of $33\frac{1}{3}\%$ on the selling price after allowing an advertised discount of 10% on the marked price? [10]

10 Green, a salesman, receives a monthly salary of \$80 and a 5% commission on all sales. In addition, he receives a commission of $1\frac{1}{2}\%$ on sales in excess of \$2500 in any single month. His sales in November amounted to \$3340 and in December to \$2250.

a Find Green's total commission. [8]

b Find his average monthly income for the two months. [2]

11 Johnson & Company of New York received from a grower in Florida a carload of lettuce to be sold on commission. The car contained 650 crates and the shipping weight was 16,250 pounds. The freight rate was \$1.20 per 100 pounds and the charge for icing was \$60. Johnson & Company sold 275 crates at \$1.70, 200 crates at \$1.60, 150 crates at \$1.40 and the remainder at 92 cents a crate. After deducting 5% commission and all charges, Johnson & Company remitted the proceeds to the grower.

a What amount did the grower receive? [8]

b What was the average selling price per crate that Johnson & Company received for the entire consignment? [2]

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

a The instalment price of an article is more than the cash price.

b Freight rates between two cities may not be the same on different kinds of merchandise.

c The selling price of an article is usually more than the cost of the article plus the profit.

d A monthly charge is often made by banks on a depositor's account in which there is a small balance.

e The rate of interest on a bond may not be the rate of income.