

BUSINESS ARITHMETIC

Tuesday, August 23, 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. Parts above the heavy line are to be worked mentally and the results placed on the sheet. Parts below the heavy line are to be worked out in full and all work shown in the spaces provided. 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, August 23, 1938 — 8.30 to 11.30 a. m.

1-2 a Add [4]

6873
1925
3814
7928
3682
1936
2824
6657
1792
4826
5943
2582
7956

b Find the interest on *each* of the following: [4]

\$457.50 for 60 days at 6% =
\$360.00 for 30 days at 4% =
\$225.00 for 120 days at 3% =
\$600.00 for 15 days at 2% =

c Make the extensions: [4]

360 bu. @ \$1.12½ =
880 yd @ .62½ =
170 lb @ .33¼ =
27 qt @ .16⅔ =

d Subtract [2]

bu.	pk	qt
3	1	1
2	3	2

Show all work for *e* and *f* on this sheet in the spaces provided.

e Multiply, using the four-step method: [3] *f* Divide [3]

$598\frac{3}{8}$
 $64\frac{1}{3}$

$3.96 \overline{)72.468}$

273D HIGH SCHOOL EXAMINATION

BUSINESS ARITHMETIC

Tuesday, August 23, 1938 — 8.30 to 11.30 a. m., only

Write at top of first page of answer paper (a) names of schools where you have studied, (b) number of weeks and recitations a week in business arithmetic previous to entering summer high school, (c) number of recitations in this subject attended in summer high school of 1938.

The minimum time requirement is five recitations a week for a school year. The summer school session in business arithmetic will be considered the equivalent of one semester's work during the regular session or five recitations a week for half a school year.

For those pupils who have met the time requirement the minimum passing mark is 65 credits; for all others 75 credits.

For admission to this examination attendance on at least 30 recitations in this subject in a registered summer high school in 1938 is required.

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 Find the cost of 6800 pounds of sugar at \$3.25 per hundredweight.
- b An office employee received an annual salary of \$1000 in 1935. On January 1 of each year since that time, he has received a 10% increase. What is his salary in 1938?
- c A man sold a house for \$5400 and thereby lost 25% of the cost. How much did he pay for the house?
- d What amount of discount is offered for cash payment on an invoice of goods for \$860, terms $\frac{3}{10}$ $\frac{n}{60}$?
- e Find the cost of 47 kilowatt-hours of electricity at $8\frac{1}{2}$ cents a kilowatt-hour.

4 Mr Campbell sold a plot of ground with a frontage of 125 feet on Main Street for \$6875. Mr Jones has a lot adjoining with a frontage of $87\frac{1}{2}$ feet on the same street. If he could sell his lot at the same price per front foot as Mr Campbell did, how much would he receive? [10]

5 An automobile sales company offered a certain automobile for \$1500 cash or \$250 cash and \$112.50 a month for twelve months.

- a What per cent a year was the company charging on the deferred-payment offer? [5]
- b How much could be saved by borrowing enough money at 6% to pay the balance immediately? [5]

6 The Bradley family decided to take a trip abroad. Mrs Bradley paid \$563.10 for clothing for the family and found she had spent $\frac{3}{8}$ of her money. The cost of the clothing was only $\frac{1}{3}$ of the estimated cost of the trip.

- a How much money did she have originally? [5]
- b What was the estimated cost of the trip? [5]

7 A bank holds a $5\frac{1}{2}\%$ mortgage for \$5200 on the store property of the Republic Company. The mortgage is dated July 1, 1936, with interest payable semiannually. It is indorsed for the following payments:

January 1, 1937 Interest due and \$400 on face
 July 1, 1937 Interest due
 January 1, 1938 Interest due and \$1200 on face

- a Find the total interest that the Republic Company paid on the mortgage for the four interest periods. [8]
- b If no additional payments were made, what was due on the day of final settlement, July 1, 1938? [2]

8 The taxes to be raised in a certain town are as follows: for county purposes, \$23,442; for town purposes, \$5048; for town highways, \$9589. The total assessed valuation of the property of the town is \$2,387,440.

- a Find the tax rate correct to five decimal places. [6]
- b Express this rate as a tax per \$1000. [1]
- c How much tax should Mr Brown pay who owns two pieces of property that are assessed at \$6200 and \$5350? [3]

BUSINESS ARITHMETIC — *concluded*

9 A publishing company sold the following books during the year:

January	826	July	525
February	942	August	1518
March	538	September	5045
April	265	October	1960
May	240	November	1292
June	216	December	3541

- a Find the total number of books sold during the year. [4]
- b Find the average number of books sold per month. [2]
- c During which months did the sales exceed the average? [2]
- d If the average profit on the books was 20 cents a volume, what was the total profit on the books? [2]

10 Wardner accepted a position as a salesman with a local business concern at a weekly salary of \$30. Johnson works for the same concern and receives a salary of \$15 a week plus a 2% commission on all his sales. At the end of a 26-week period, his sales amount to \$26,852.50.

- a Which salesman receives the larger compensation for the 26-week period? [2]
- b How much larger? [8]

11 Find the cost of the following invoice: [10] [This is a test for accuracy; no partial credit will be allowed.]

26,880 lb oats (32 lb to a bu.) @ \$.43 per bushel =

19,440 lb wheat (60 lb to a bu.) @ \$.97½ per bushel =

54,684 lb flour (196 lb to a bbl) @ \$6.25 per barrel =

27 tons 192 lb hay @ \$16.50 per ton =