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.
1-2  a  Add  [4]

4 5 6
5 7 9 4
7 6 5 3 2
9 6 7
8 7 6 5 8
4 3 6 9
2 1 2 3
3 5 2 5 4
4 6 8 3
2 8 7 6 5
5 1 2 4
7 1 6 7 6
3 7 8 2
5 2 4 9 7
8 7 0
4 7 4 6
8 7 3 2 3
1 9 5

b  Make the extensions:  [4]
1800 pounds @ $16 per ton =
125 pounds @ $2.80 per C =
165 articles @ $.03½ =
1750 articles @ $12 per M =
[Footing not required]

c  Find the interest on each of the following:  [4]
$125 for 90 days at 6% =
$160 for 3 months at 5% =
$90 for 14 days at 6% =
$360 for 40 days at 4½% =
[Footing not required]

d  Place answers in proper columns:  [6]

Marked Selling Cost Gain Rate of Rate of Rate of
Price Price Price Gain on Gain on Discount on
Selling Marked Selling Gain on Gain on Discount on
Price Price Price

$60 $50 $40 $10 ........... ........... ...............
$30 $24 $16 $8 ........... ........... ...............

e  Underline the correct answer for each of the following:  [2]
.025, expressed in per cent, is (250%; 2½%; 25%)
One hundred five ten-thousandths, expressed in figures, is (10500; .105; .0105)
The University of the State of New York
259TH HIGH SCHOOL EXAMINATION
COMMERCIAL ARITHMETIC

Tuesday, January 23, 1934 — 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 A three-months' note, dated November 21, 1933, is discounted 20 days later. Find the length of time for which discount is charged.
   b A house is 26' x 32'. Give the dimensions of a diagram of the house if a scale of $\frac{\frac{1}{2}}{1} = 1'$ is used.
   c A dealer marks goods 25% above the gross cost. Find the marked price of a desk costing $32.40, on which he had to pay freight charges amounting to $4.80.
   d Find the area of the ceiling of a room which is 16 feet long and whose width is three fourths of its length.
   e The tax rate in a certain village is $1.863 per $100; what is the tax on a piece of property assessed at $5600?

4 A sales contest is being conducted and each salesman is rated according to his weekly average amount of sales. Clark's average sales for the last 8 weeks of 1933 were $362.15 a week. For the first 3 weeks of 1934, his sales amounted to $415.16, $523.25 and $392.35 respectively. Find Clark's average weekly sales for the 11 weeks. [10]

5 An oil burner for a furnace is priced at $355 cash. Jones buys one on the deferred-payment plan for $362, paying $162 when the burner is installed and the balance in four monthly instalments of $50 each. The additional cost includes interest and finance charge.
   a At 6%, how much of the additional cost represented interest on the payments? [8]
   b What amount represented the finance charge? [2]
COMMERCIAL ARITHMETIC — concluded

11 On December 31, 1933, the Columbia Grocery had in stock the merchandise listed below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lard</td>
<td>224 lbs.</td>
<td>$0.12 1/8</td>
<td>$28.00</td>
</tr>
<tr>
<td>Peaches</td>
<td>25 1/2 doz.</td>
<td>$1.60</td>
<td>41.80</td>
</tr>
<tr>
<td>No. 2 Peas</td>
<td>15 1/2 doz.</td>
<td>$1.80</td>
<td>27.45</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>36 doz.</td>
<td>$1.15</td>
<td>44.10</td>
</tr>
<tr>
<td>Potatoes</td>
<td>123 bu.</td>
<td>$0.75</td>
<td>92.65</td>
</tr>
<tr>
<td>Oranges</td>
<td>65 doz.</td>
<td>$0.31</td>
<td>20.15</td>
</tr>
<tr>
<td>Coffee</td>
<td>76 lbs.</td>
<td>$0.33 1/3</td>
<td>25.33</td>
</tr>
<tr>
<td>Sugar</td>
<td>550 lbs.</td>
<td>$0.04 1/2</td>
<td>24.75</td>
</tr>
<tr>
<td>Tea</td>
<td>48 lbs.</td>
<td>$0.37 1/2</td>
<td>17.00</td>
</tr>
</tbody>
</table>

$321.18

Verify the above extensions, point out any errors and give the correct total. [This is a test for accuracy; no partial credit will be allowed.] [10]

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

a A manufacturer or wholesaler often publishes the trade discount for a certain article on a separate sheet rather than in the catalog.

b The number of firms that pay their employees in currency has tended to increase during the last two years.

c In order to increase profits, it may be desirable to reduce the selling price of an article.

d A business man sometimes makes money by borrowing the money with which to pay for a bill of goods.

e When fire-insurance policies are written for a period longer than one year, lower rates are offered.