

$$\begin{aligned}
 (1) \quad 2x + 2y - 600 &= 2(600 - 2x) \\
 (2) \quad x + y : 600 - x &:: 5 : 4 \\
 \text{By transposing (1)} \quad 3x + y &= 900 \\
 \text{And simplifying (2)} \quad 9x + 4y &= 3000 \\
 \text{Multiply (1) by 3} \quad 9x + 3y &= 2700 \\
 \text{Subtract (2)} \quad \underline{9x + 4y = 3000} \\
 & \quad \quad \quad -y = -300 \\
 & \quad \quad \quad y = 300
 \end{aligned}$$

J. E. M., LIVERPOOL, N. S.—I am very much interested in birds, though I have not much time to devote to their study. Last summer I learned to distinguish about sixty of our land birds by sight. I also learned to recognize the songs and calls of many of them. For several winters we have been feeding in the back yard juncos, bluejays, Canada jays; song, fox, tree, chipping and English sparrows; black caps and Hudsonian chickadees, woodpeckers, a sap-sucker and four squirrels. They have not only been a source of amusement, but also of much information concerning their table-manners.

Will you kindly answer the following questions:

1. Does the American goldfinch, when wintering in Nova Scotia, change its yellow coat for a gray one? I have noticed, during the last two winters, a bird identical with the American goldfinch in size, flight, call and color of wings, but with a gray body. I have seen them singly and in small flocks eating thistle seeds.

2. I saw with flocks of robins this spring several black-birds that seemed to be a little smaller than the average robin. The song, or call, sounds like "chuck-e-derk," the first two notes sounded quickly, the last one drawn out. These sounds are immediately followed by one like "deek," seemingly a reply from a second bird of the same kind. Is it the rusty blackbird?

1. The American goldfinch or thistle-bird changes its coat in winter to the color of the female, which is grayish brown, with an olive tinge, on the upper parts. The pine siskin or pine finch is nearer to the color of the bird you describe.

2. Yes.

Hay's History of New Brunswick has already won a place for itself. It is very popular among the pupils of Grades III and IV. Its legends appeal strongly to their imagination, and thus awaken and keep alive their interest in this subject.—*Inspector Mersereau, in N. B. School Report.*

Johnnie—Papa, do two negatives make an affirmative?

Papa—That's the rule.

Johnnie—Well, you said "No, no," when I asked you for a quarter this morning. When do I get it?
The Ingleside.

Each month the REVIEW is received with pleasure and read with enjoyment.—M. E. M.

Mental Arithmetic. IV.

F. H. SPINNEY, NORTH SYDNEY, C. B.

COMMISSION.

Commission is a branch of arithmetic of great practical value, and furnishes a variety of interesting problems.

Teachers frequently find some difficulty in making clear the distinction between the forms used in commission charged for buying, and commission charged for selling articles of commerce. A careful drill in mental arithmetic will make clear that very slight distinction.

Start with such verbal questions as: If an agent in Halifax sells \$100 worth of potatoes for farmer Jones, and charges him \$6 for doing the business, what will the agent charge for selling potatoes to the value of \$200? \$300? \$400? How much money will he send to the farmer out of the \$100? out of the \$200? out of the \$300? out of the \$400? Later on explain that what the farmer receives is called proceeds.

After the terms are understood, arrange some questions, for mental drill, in the following form:

I. Value of Goods Sold.	Rate per \$100.	Commission.	Proceeds.
\$700	\$5	?	?
\$900	\$4	?	?
\$400	\$5½	?	?

When answers have been supplied by the pupils to twelve or more such questions, erase the figures in the second column, and have them replaced. Then add more in that form.

II. Value of Goods Sold.	Rate per \$100.	Commission.
\$700	?	\$28
\$600	?	\$33
\$360	?	\$18

Now add harder ones for the use of the pencil. Let the pupils find an original form for a "written expression." If their forms are clumsy, suggest one more concise. The following answers the purpose: Rate per \$100 = $\frac{100}{100}$ of \$28 = \$4.

Then proceed to find "Value of goods sold."

III. Value of Goods Sold.	Rate per \$100.	Commission.
?	\$6	\$12.00
?	\$5	\$ 2.50
?	\$5	\$ 0.20

Do not ask for a written form until a great many questions have been solved mentally. Twenty or more such questions as above can be solved in five minutes.

The following is a concise written form: