- 15. Express the numbers from forty-one to forty-nine.
- 16. When two figures are written side by side, what does the figure at the right represent?
 - 17. What does the figure at the left represent?
 - 18. Write all the numbers from one to forty-nine.
- 19. Express in words: 24, 32, 38, 47, 18, 29, 10, 31, 49, 30.

LESSON XXXI.

- 1. Express 5 tens, or fifty: 50.
- 2. How many figures are required to represent the number fifty?.
 - 3. What is the figure at the right?.
 - 4. What is the figure at the left?.
 - 5. How many tens are there in fifty?
 - 6. Express 5 tens and 1, or fifty-one..
 - 7. Write the numbers from fifty-one to fifty-nine. .
 - 8. Express 6 tens, or sixty: 60.
 - 9. Write the numbers from sixty to sixty-nine. •
 - 10. Express the number seventy.
 - 11. How many tens are there in seventy?
- 12. How many ones are there in seventy? How is this shown?
- 13. Write the numbers from seventy to seventynine. Read them.
- 14. Write the numbers from eighty to eightynine. Read them.

- 15. How many tens and ones are there in eighty-seven? In eighty-five? In eighty-eight?
- 16. Express in figures the numbers from eighty to eighty-eight.
 - 17. Write 8 tens and 9 ones, or eighty-nine.
 - 18. Express 9 tens, or ninety: 90.
 - 19. Write the numbers from ninety to ninety-nine.
- 20. Ninety-nine and one more, make how many? One hundred.
 - 21. How many tens are 9 tens and 1 ten?
 - 22. How many tens are there in one hundred?
 - 23. One hundred is expressed thus: 100.

The figure 0 at the right shows that there are no ones, the 0 next to it shows that there are no tens, and the figure 1 shows that there is one hundred.

When three figures are written side by side, the figure in the first place at the right represents ONES, the one next to it TENS, and the one at the left HUNDREDS.

SLATE EXERCISES.

Express in figures the following:

Thirty-two	Eighty	Forty-nine
Ninety-six	Eighteen	Sixty-seven
Eighty-four	Seventy-one	Thirty-three
Forty-seven	Twenty-nine	Thirty-eight

Copy and express in words the following:

36	52	28	77	78
84	81	39	29	55

LESSON XXXII.

1. If you pay 1 cent for a pear, how many cents will you pay for 2 pears?

2. How many cents are 1 cent and 1 cent?

3. If you pay 1 cent for a slate-pencil, how many cents will you pay for 3 pencils?

4. How does the price of 3 pencils compare with

the price of 1 pencil?

5. If a fig costs one cent, how many times 1 cent will 4 figs cost?

6. How many chairs are 5 times 1 chair?

This sign \times takes the place of the word times. Thus, 2 times 1 are 2, is written $2 \times 1 = 2$, and is read 2 times 1 equals 2.

- 7. If 1 marble costs 1 cent, what will 6 marbles cost? $6 \times 1 = 6$.
- 8. Seven boys each own a sled. How many sleds do they all own? $7 \times 1 = ?$

9. Each of 8 boys has a pair of skates. How many pairs do they all own? $8 \times 1 = ?$

10. Nine men each own an acre of land. How many acres do they all own? $9 \times 1 = ?$

11. How many are 10 times 1? $10 \times 1 = ?$

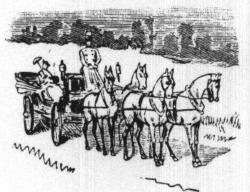
12. How many are 3 times 1? $3 \times 1 = ?$

13. If you pay 1 cent for an apple, how many cents will you pay for 7 apples?

14. If each pupil, in a class of 9 pupils, answers question, how many questions will they all answer?

LESSON XXXIII.

1. A horse has 2 eyes. How many eyes have 2 horses? How many eyes are 2 times 2 eyes?



- 2. A horse has 2 ears. How many ears have 3 horses? $3 \times 2 = ?$
- 3. If 1 rocking-horse costs 2 dollars, what will 4 rocking-horses cost? 4 × 2=?
- school only 2 days each week, how many days will he attend in 5 weeks?
- 5. A boy read 2 pages of his book each day for 6 days. How many pages did he read in that time?
- 6. If a boy earn 2 dollars a week, how many dollars will be earn in 7 weeks? $7 \times 2 = ?$
- 7. What will 8 sheets of blotting-paper cost at 2 cents a sheet? $8 \times 2 = ?$
- 8. What will 9 pairs of shoes cost at 2 dollars a pair? $9 \times 2 = ?$
- 9. How many cents are there in 10 two-cent pieces?
- 10. If it requires 2 yards of cloth to make a child's cloak, how many yards will it require to make 8 such cloaks?

A short process of adding equal numbers is called **Multiplication**.

11. Form the multiplication tables of ones and

TABLES.

$1 \times 1 = 1$ $6 \times 1 = 6$	$1 \times 2 = 2 6 \times 2 = 12$
$2 \times 1 = 2$ $7 \times 1 = 7$	$2\times2=4$ $7\times2=14$
$3 \times 1 = 3$ $8 \times 1 = 8$	$3 \times 2 = 6 8 \times 2 = 16$
$4 \times 1 = 4 9 \times 1 = 9$	$4 \times 2 = 8 9 \times 2 = 18$
$5 \times 1 = 5 \ 10 \times 1 = 10$	$5 \times 2 = 10 \ 10 \times 2 = 20$

LESSON XXXIV.

00000

- 1. If a boy walks 3 miles in 1 hour, how many miles will he walk in 2 hours? $2 \times 3 = ?$
 - 2. What will 3 engravings cost at 3 dollars each?
- 3. Martha put 3 tulip bulbs in each of 4 pots. How many bulbs did she plant? $4 \times 3 = ?$
- 4. Each of 5 boys threw 3 stones into the water. How many stones did they all throw? $5 \times 3 = ?$
- 5. If the pupils learn 3 songs in a month, how many songs will they learn in 6 months?
- 6. If there are 3 cherries in 1 bunch, how many cherries are there in 7_such bunches?
- 7. If there are 8 boats, and 3 boys in each boat, how many boys are there in the boats?
- S. If there are 3 globes on 1 chandelier, how many globes are there on 9 such chandeliers?

9. If a boy gives 4 cents for 1 orange, how many cents will he give for 2 oranges? $2 \times 4 = ?$



10. A lumberman put 4 logs in the river each day for 3 days. How many logs did he put in the river? How many are 3 times 4? $3\times4=$?

11. If there are 4 crows sitting on each of 4 limbs of a tree, how many crows

are there on the tree? $4 \times 4 =$? How many are 4 times 4?

12. What will 5 tons of hay cost at 4 dollars a ton? $5 \times 4 = ?$

13. $6 \times 4 = ?$ $7 \times 4 = ?$ $8 \times 4 = ?$ $9 \times 4 = ?$

14. How many girls are there in 10 groups of 4 girls each? $10 \times 4 = ?$

15. If a man can walk 4 miles in an hour, how far can he walk in 6 hours? $6 \times 4 = ?$

16. Form the multiplication tables of threes and fours.

TABLES.

- IN ARITHMETIC. 57

 LESSON XXXV.

 1. If 1 man builds 2 rods of fence in one day, how many rods can 5 men build in the same time?
- 2. If a shoe-maker makes 4 pairs of shoes in 1 day, how many pairs will he make in 6 days? $6 \times 4 = ?$
- 3. If a turner can turn 3 rolling-pins in 1 minute, how many can he turn in 8 minutes? $8 \times 3 = ?$
- 4. If a woman sells 4 quarts of milk a day, how many quarts does she sell in 9 days? $9 \times 4 = ?$
- 5. In 1 pint there are 4 gills. How many gills are there in 5 pints? $5 \times 4 = ?$
- 6. A boy bought 4 pints of chestnuts at 3 cents spint, and sold them for 20 cents. How much did he gain? $4 \times 3 = ?$
- $(5 \times 3) + (3 \times 4) = ? (4 \times 2) + (6 \times 3) = ?$
- 8. If a boy husks 3 bushels of corn in 1 hour, how many bushels will he husk in 7 hours? $7 \times 3 = ?$
- 9. If 2 yards of lace will make 1 curtain, how many yards are required to make 4 curtains?
- 1 10. In 1 bushel there are 4 pecks. How many pecks are there in 7 bushels? $7 \times 4 = ?$
- 11. How many are 9 times 2? 7×2 ? 5×2 ?
- 12. If there are 4 blades in 1 pocket-knife, how many blades are there in 10 such knives? $10 \times 4 = ?$
- \$13. What will be the cost of 9 historical charts at 3 dollars each? $9 \times 3 = ?$
- 14. If in 1 field there are 4 acres, how many cres are there in 4 such fields? $4 \times 4 = ?$

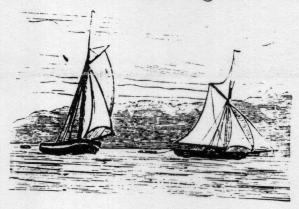
SLATE EXERCISES.

Copy and multiply the following:

3	2	4	3	2	4	3	4
5	4	8	7	9	4 6	3	5
				_		_	×

LESSON XXXVI.

1. John gave 5 cents apiece to each of 2 beggars. How much did he give to both? $2 \times 5 = ?$



- 2. If a boat sails 5 miles in 1 hour, how far will she sail in 3 hours? $3 \times 5 = 3$
- 3. In each of 4 nests there are 5 eggs. How many eggs are there in the 4 nests?

How many are 4 times 5? $4 \times 5 = ?$

- 4. What will 5 barrels of flour cost at 5 dollars a barrel? $5 \times 5 = ?$
- 5. A cartman can draw 5 barrels of salt at 1 load, How many barrels can be draw in 6 loads? How many are 6 times 5?
- 6. What will 7 bunches of matches cost at 5 cents a bunch? $7 \times 5 = ?$
- 7. How many are 8 times 5? How many are 9 times 5?

8. How many cents are there in 10 five-cent pieces? $10 \times 5 = ?$

9. $4 \times 5 = ?$ $3 \times 5 = ?$ $7 \times 5 = ?$ $8 \times 5 = ?$

10. There are 6 lamps on each of 2 shelves. How many lamps are there on both shelves? $2 \times 6 = ?$

how many bushels can be ground in 1 hour, how many are 3 times 6?

12. If a boy writes 6 lines in his writing-book ach day for 4 days, how many lines will he write?

How many are 4 times 6?

how many dollars will he pay? $5 \times 6 = ?$

14. How many are 6 times 6? How many are 7

times 6?

How many pencils are there in 8 such packages?
-8×6=?

16. How many are 9 times 6? 10 times 6 are

how many?

17. Form the multiplication tables of fives and exes.

TABLES.

LESSON XXXVII.

1. If a croquet-player drives a ball through 2 arches at each stroke, through how many arches will he drive it by 3 strokes? $3 \times 2 = ?$

2. How many are 9 sleds, 2 sleds, and 8 sleds?

3. A boy who shot 18 prairie-chickens, gave 2 to George, 3 to Henry, and 7 to Caspar. How many had he left? 18-(2+3+7)=?

4. A man bought 6 bushels of wheat at 2 dollars a bushel, and 8 bushels of barley at 1 dollar a bushel. What did he pay for both?

5. How many soldiers are there in 4 squads of

5 soldiers each?

6.
$$(6 \times 2) + (8 \times 1) = ?$$
 $(3 \times 5) + (4 \times 1) = ?$

7.
$$(4 \times 2) + (3 \times 3) = ?$$
 $(2 \times 5) + (2 \times 3) = ?$

8. How many feet have 4 dogs? 7 dogs?

9. How many eyes have 6 horses? 9 horses?

10. How many legs have 6 rabbits? 8 rabbits?

11. How many wings have 10 birds? 7 birds?

12. From a bin containing 16 bushels of potatoes 4 bushels were taken at one time, and 6 at another. How many bushels remained in the bin?

13. A woman had a jar of butter, containing 20 pounds. She used 5 pounds one week, 6 pounds the next week, and the remainder the third week. How much did she use the third week?

14. There are 3 feet in 1 yard. How many feet are there in 7 yards?

15.
$$10+6-(4\times2)=?$$
 $12-3+(5\times6)=?$

- 16. A drover had 6 cows in one field, 8 cows in another, and 12 in another. How many cows had he in the three fields?
- 17. If a girl can pick 3 quarts of berries in 1 hour, how many quarts can she pick in 3 hours?

SLATE EXERCISES

Copy and multiply the following:

6	5	4	3	2	7	3	6	4	3
5	7	9	8	9	4	7	9	8	7
			_	_	—				

LESSON XXXVIII.

- 1. In 1 week there are 7 days. How many days are there in 2 weeks? $2 \times 7 = ?$
- 2. How many rods of ditch were dug, if 7 rods were dug each day for 3 days? $3 \times 7 = ?$
- 3. If there are 7 pickets in 1 gate, how many pickets are there in 4 such gates? $4 \times 7 = ?$
- 4. How many tomatoes are there, if there are 7 tomatoes on each of 5 plants? $5 \times 7 = ?$
- 5. If there are 7 flags displayed at each of 6 windows, how many flags are displayed? $6 \times 7 = ?$
- 6. What will a man receive for setting 7 panes of glass at 7 cents a pane? $7 \times 7 = ?$
- 7. If you can make 7 marks in 1 second, how many marks can you make in 8 seconds? $8 \times 7 = ?$

- 8. If it takes 9 men 7 days to do a piece of work, how long will it take 1 man to do it? $9 \times 7 = ?$
- 9. How much will Henry earn in 10 weeks, if he earns 7 dollars a week? $10 \times 7 = ?$
- 1 10. If a woman packs 8 pounds of butter in 1 week, how much will she pack in 2 weeks? $2 \times 8 = 2$
- 1 11. What will 3 pounds of raisins cost at 8 cents a pound? $3 \times 8 = ?$
- 12. How many are 4 times 8? How many are 5 times 8?
- 13. If a man draws 8 loads of grain in 1 day, how many loads will he draw in 6 days? $6 \times 8 = ?$
- 14. If there are 8 candles in 1 pound, how many candles are there in 7 pounds? $7 \times 8 = ?$
- 15. What will 8 quarts of cherries cost at 8 cents a quart? $8 \times 8 = ?$
- 16. If a cooper sells 8 barrels each day for 9 days, how many barrels will he sell? $9 \times 8 = ?$
- 17. If 8 pupils can sit on 1 seat, how many pupils can sit on 10 such seats? $10 \times 8 = ?$
- 18. Form the multiplication tables of sevens and eights.

TABLES.

$ \begin{array}{rrrr} 1 \times 7 & 6 \times 7 = 42 \\ 2 \times 7 = 14 & 7 \times 7 = 49 \\ 3 \times 7 = 21 & 8 \times 7 = 56 \\ 4 \times 7 = 28 & 9 \times 7 = 63 \\ 5 \times 7 = 35 & 10 \times 7 = 70 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$2 \times 8 = 16$ 7 $3 \times 8 = 24$ 8 $4 \times 8 = 32$ 9

LESSON XXXIX.

1. A boy having 24 cents, bought 2 oranges at 6 cents apiece. How many cents had he left? $24-(2\times6)=?$

2. John sold 3 bananas at 8 cents apiece, and 2 cups of peanuts at 5 cents a cup. What did he re-

ceive for the whole?

3. Henry solved 7 examples on Monday, 5 on Tuesday, and 9 on Wednesday. How many examples did he solve in the three days?

4. If he solved 16 examples the next week, how many examples more did he solve the first week than

the second?

5. Count to 50 by 10's. Count to 30 by 5's.

- 6. How many are 2 and 4? 2 and 14? 2 and 14? 2 and 34?
- 7. How many are 4 and 5? 4 and 15? 4 and 25? 4 and 35?
- 8. How many are 5 and 6? 15 and 6? 25 and 6? 35 and 6?
- 9. If a horse eats 3 bushels of oats in one week, how many bushels will he eat in 8 weeks?

10. What is the cost of 7 cakes of soap at 10 cents cake?

11. A boy worked 7 weeks for 8 dollars a week, and spent 20 dollars for clothes. How much money had he left? $(7 \times 8) - 20 = ?$

12. If a wheel has only 7 spokes, how many spokes

will 7 such wheels have?

- 13. A man earns 16 dollars a week, and his son earns 10 dollars. How much do they both earn?
- 14. How much more does the father earn than the son?
- 15. If a mechanic earns 5 dollars a day for 2 days, and 6 dollars a day for 3 days, how much money will be earn in that time? $(2\times5)+(3\times6)=?$
- 16. A boy sold 2 chickens for 3 dimes each, and 2 dozens of eggs at 2 dimes a dozen. How many dimes did he receive?
- 17. What will be the cost of 2 pairs of pantaloons at 6 dollars a pair, and 3 vests at 3 dollars each?
- 18. What will be the cost of 8 ounces of candy at 5 cents an ounce, and 2 packages of envelopes at 15 cents a package?
- 19. How many days are there in 7 weeks? How many are 7 times 7?
- 20. If a family burns 8 tons of coal worth 6 dollars a ton, and 5 cords of wood worth 5 dollars a cord, how much will the fuel cost?
- 21. If 4 chairs are bought at 5 dollars apiece, and 3 tables at 6 dollars each, how much will they all cost?

22.
$$4+5+(3\times8)=?$$
 $(2\times6)+5-3=?$

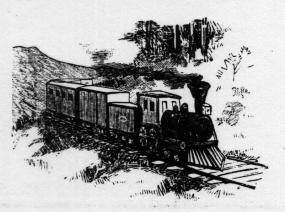
SLATE EXERCISES.

Copy and multiply the following:

_									
8	7	, 6	9	4	5	7	6	8	5
5	6	Q	4	7	0	_		U	.,
-	U	0	4	- 1	6	8	6	3	5
		8	_						_

LESSON XL.

- 1. A man bought 2 loaves of bread at 9 cents a loaf. How much did they cost him? 2 times 9 = ?
- rose-buds in one bouquet, how many rose-buds are there in 3 such bouquets?
- 3. If it require 9 cons of coal to run a rain of cars one trip, cow many tons will it



equire to run 4 such trips? How many are 4×9 ?

- 4. In one square yard there are 9 square feet. ow many square feet are there in 5 square yards?
- 5. At 9 dollars a barrel, what will 6 barrels of our cost?
- 6. In an orchard there are 9 trees in a row, and rows. How many trees are there in the orchard?
- 7. What will 8 pounds of nails cost at 9 cents a ound?
- 8. When sugar is selling at 9 cents a pound, how nuch will 9 pounds cost? $9 \times 9 = ?$
- 9. How many cents must be paid for 10 yards of auslin at 9 cents a yard? $10 \times 9 = ?$
- 10. Mary is 10 years old, and her sister is twice old. How old is her sister? $2 \times 10 = ?$
- There are 10 cents in a dime. How many ents are there in 3 dimes? $3 \times 10 = ?3$

12. If one shelf will hold 10 books, how many books will 4 such shelves hold? $4 \times 10 = ?$

13. In one dollar there are 10 dimes. How many dimes are there in 5 dollars? $5 \times 10 = ?$

14. Henry received 10 credit marks per day for 6 days. How many did he receive? $6 \times 10 = ?$

15. If 10 marbles can be bought for 1 cent, how many can be bought for 7 cents? $7 \times 10 = ?$

16. If there are 10 weeks in one term of school, how many weeks are there in 8 terms? $8 \times 10 = ?$

17. A farmer sold 9 hogs at 10 dollars apiece. How many dollars did he get for them? $9 \times 10 = ?$

18. If sewing needles cost 10 cents a paper, what will 10 papers cost? $10 \times 10 = ?$

19. Form the multiplication tables of nines and tens.

TABLES.

$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
	$2 \times 9 = 18$ $7 \times 9 = 63$ $3 \times 9 = 27$ $8 \times 9 = 72$ $4 \times 9 = 36$ $9 \times 9 = 81$	$2 \times 10 = 20$ $7 \times 10 = 70$ $3 \times 10 = 30$ $8 \times 10 = 80$ $4 \times 10 = 40$ $9 \times 10 = 90$

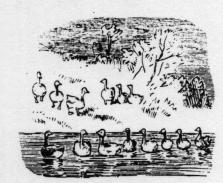
SLATE EXERCISES.

Copy and multiply the following:

5	3	6	5	4	- 5	4	5	7
4	3 2	3	7.	3	8	7	.6,	10
	-		—,					

LESSON XLI.

- 1. If there are 8 goslings in the water and 6 on the land, how many goslings are there altogether?
- 2. How many more goslings are there in the water than there are on the land?
- 3. Henry has 7 sheep, and his father has 9 times as many. How many sheep has his father?



- 4. How many sheep have Henry and his father? How many are 63 and 7?
- 5. An Indian sold 8 baskets at 10 cents apiece. How much did he receive for them? $8 \times 10 = ?$
- 6. A boy having 6 rabbits, bought 8 more, and then sold 9. How many had he left?
 - 7. Count to 48 by 6's. Count to 63 by 7's.
 - 8. Count back from 45 to 0 by 9's.
- 9. From a crock of butter weighing 25 pounds pounds were taken at one time, 3 at another, and 6 at another. How many pounds remained?
- 10. A laundress bought at one time 3 flat-irons, each weighing 6 pounds; at another time 2 flat-irons, each weighing 8 pounds. What was the entire weight of the irons?
- 11. At 8 dollars a term each, how much will a nusic-teacher receive for 6 pupils? $6 \times 8 = ?$
- 12. There are 7 days in one week. How many days are there in 9 weeks? $7 \times 9 = ?$ $9 \times 7 = ?$

- 13. If a horse trot 9 miles in one hour, how far will he travel in 10 hours? $10 \times 9 = ?$ $9 \times 10 = ?$
- 14. If one passenger-car has 8 wheels, how many such wheels will 5 cars have? $5 \times 8 = ?$ $8 \times 5 = ?$

SLATE EXERCISES.

Copy and multiply the following:

7	8	9	6	8	9	7	8	7
5	4	3	5	9	5	6	3	2
				Service Control of the Control of th		-		

LESSON XLII.

- 1. A cutler sold 6 sets of knives one day, 5 sets the next day, and 8 sets the next. How many sets did he sell?
- 2. What is addition? What is the sign of addition?
- 3. A painter having 13 pounds of paint, used 6 pounds one day and 3 the next. How many pounds had he left? 13-(6+3)=? 13-6-3=?
- 4. What is subtraction? What is the sign of subtraction?
- 5. A farmer sold 3 sheep at 4 dollars apiece, and 6 calves at 5 dollars a head. What did he receive for the whole? $(3 \times 4) + (6 \times 5) = ?$
- 6. What is multiplication? What is the sign of multiplication?

7.
$$8+5+6=?$$
 $24-3-6=?$ $8\times 2=?$

- 8. In one yard there are 3 feet. How many feet are there in 4 yards? How many feet are there in 5 yards?
- 9. If a squirrel eats 8 nuts in one day, how many nuts will be eat in 9 days? $9 \times 8 = ? 8 \times 9 = ?$
- 10. What will be the cost of 6 pears at 6 cents each? $6 \times 6 = ?$
- 11. In one peck there are 8 quarts. How many quarts are there in 5 pecks? $5 \times 8 = ?$
- 12. How many are 9 times 5? How many are 7 times 6?
- 12. There are 4 classes in a school, each class conaining 10 pupils. How many pupils are there in the school? $4 \times 10 = ?$
- 14. In an orchard there are 7 rows of trees, and trees in each row. How many trees are there in the orchard? $7 \times 9 = ?$ $9 \times 7 = ?$
- 15. A man having 16 cords of wood, used all but cords. How many cords did he use? 16-5=?
- 16. Helen gave 7 yards of cloth to a poor woman, and had 9 yards left. How many yards had she at first?

$$17. 17+3-8=? 21-6=? 21-(6+5)=?$$

			SLAT	е Б	Exercis	SES.		
Co	ру,	add,	subtract,				ne foll	owing:
	5	8	9	8	5	6	9	8
1.	3	7	4	2	3	2	4	4
				_	_	_	_	

REVIEW EXERCISES.

Find the value of the following:

7×9	3×4	3×8	8×6	6×6
6×5	8×5	5 imes 4	7×3	3×9
5×8	6×7	6×8	4×9	7×5
4×7	3×9	2×9	3×5	8×9
6×6	4×8	8×8	8×7	5×4
4×3	5 imes 5	7×4	6 imes2	6×8
8×2	6×9	6×9	8×4	7×4
7×7	3×3	5 imes3	7×7	5×9
8×4	5×9	8×9	5 imes 9	$5 \! imes \! 6$
3×5	4×4	5×6	3×4	6×7
6×6	3×6	3×8	8×7	4×9
5×8	6 imes 2	7×2	9×4	8×9

Find the value of the following:

REVIEW EXERCISES.

Copy and find the value of the following:

Copy and find the value of the following: