Ch. 5. 2 NOTES

Equivalent. describe the SAME ratio

organizes your ratios ratio tuble Bays 10 20 30

Example 1 - Completing ratio tables

Find the missing value(s) in each ratio table. Then write the equivalent ratios ×3

a.

Pens	1	2	3
Pencils	3	6	9

b.	Dogs	4	8	24
	Cats	6	12	36

- N 12		0
equivalent 1	2	3
ratios 3	6	,9
Turios)		

4	8	24
6	12	36

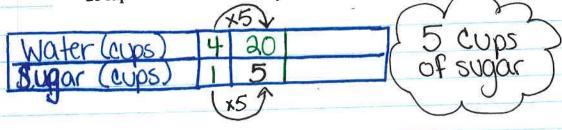
On	your O	WY	2	1x:	3
-1.	Plantains	4	8	12	
	Bananas	3	6	9	
		/x	25	J.	3

		K	(2)	Tx
۷.	Euros	5	10	40
	Dollars	4	8	32
		(x	21	10
			_	140

5	10	40
4	8	32

Example 2 Making a Ratio Table

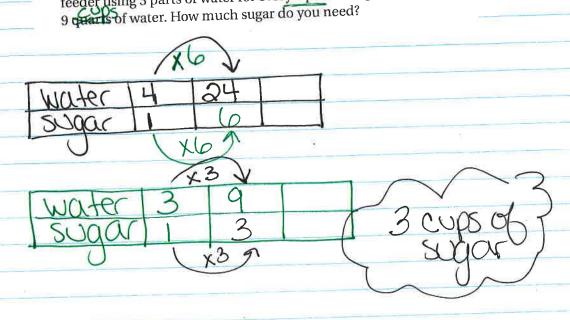
You are making sugar water for your hummingbird feeder. A website indicates to use 4 parts of water for every 1 part of sugar. You use 20 cups of water. How much sugar do you need?



On your own

3. WHAT IF? You use 24 cups of water. How much sugar do you need?

You make a sweeter mixture of sugar water for your hummingbird feeder using 3 parts of water for every 1 part of sugar. You use



Questions?

EXAMPLE

Study Tip

multiply by

In Example 3, notice that you could use one step in the ratio table:

 $\frac{1}{2} \cdot \frac{1}{6} \cdot 5 = \frac{5}{12}.$

Using a Ratio Table

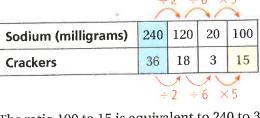


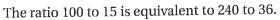
The nutrition facts label on a box of crackers shows that there are 240 milligrams of sodium in every 36 crackers.

a. You eat 15 crackers. How much sodium do you consume?

The ratio of sodium to crackers is 240 to 36. Use a ratio table to find an equivalent ratio with 15 crackers.

*	+	2 -	6 ×	5
Sodium (milligrams)	240	120	20	100
Crackers	36	18	3	15
	÷	1 \ 2 ÷	6 >	(5

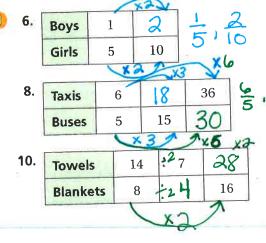




- So, you consume 100 milligrams of sodium.
- b. You eat 21 crackers. How much sodium do you consume? Notice that you can add the two middle columns in the table above.
 - So, you consume 120 + 20 = 140 milligrams of sodium in 18 + 3 = 21 crackers.

Practice

Find the missing value(s) in the ratio table. Then write the equivalent ratios.



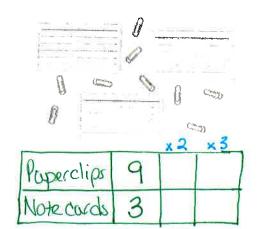
Violins	8	24	0 1	24
Cellos	3	9	<u>ح</u>	9
	X3	***	X	3
Burgers	3	6	9	3 6 9
Hot Dogs	5	10	15	
	6)×	3
Forks	16	28	48	× 3
Spoons	10	5	30	48
	1		1x3	
16	,8	, 48		
10	5	30)	
	Cellos Burgers Hot Dogs Forks	Cellos 3 Burgers 3 Hot Dogs 5 Forks 16	Cellos 3 9 Burgers 3 6 Hot Dogs 5 10 Forks 16 2 8 Spoons 10 5	Cellos 3 9 Burgers 3 6 9 Hot Dogs 5 10 15 Forks 16 28 48

5.2

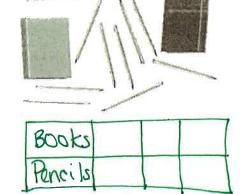
Practice A

Write and describe several ratios for the following

1.



2.



Find the missing value in the ratio table.

3.	Cars	Trucks	
120	3	5	1,2
4.	6		1/ "

	4.	TVs	Computers	
		2	7	7×
X			21	/^

Complete the ratio table to solve the problem.

5. For every 2 cars you wash, your friend washes 3 cars. You wash a total of 8 cars. How many does your friend wash?

	You	Friend	
	2	3	1
1	8		12

Your closet has 5 shirts for every2 sweaters. Your closet has30 shirts. How many sweatersare in your closet?

	Shirts	Sweaters	
-	5	2	-
	10		
ĺ		10	
	30		K

7. You are making a salad. The ratio of olives to croutons is 5:3. You put 12 croutons in your salad. How many olives do you put in your salad?

¥	Olives	croutons	•
× (/ 5	3	
, (112	×
LÇ	1	1	