

Reteach

Ratio Tables

A **ratio table** organizes data into columns that are filled with pairs of numbers that have the same ratio, or are equivalent. **Equivalent ratios** express the same relationship between two quantities.

Example 1

BAKING You need 1 cup of rolled oats to make 24 oatmeal cookies. Use the ratio table below to find how many oatmeal cookies you can make with 5 cups of rolled oats.

Cups of Oats	1				5
Oatmeal Cookies	24				■

Find a pattern and extend it.

Cups of Oats	1	2	3	4	5
Oatmeal Cookies	24	48	72	96	120

$+1$ $+1$ $+1$ $+1$

 $+24$ $+24$ $+24$ $+24$

So, 120 oatmeal cookies can be made with 5 cups of rolled oats.

Multiplying or dividing two related quantities by the same number is called **scaling**. You may sometimes need to *scale back* and then *scale forward* or vice versa to find an equivalent ratio.

Example 2

SHOPPING A department store has socks on sale for 4 pairs for \$10. Use the ratio table at the right to find the cost of 6 pairs of socks.

There is no whole number by which you can multiply 4 to get 6. Instead, scale back to 2 and then forward to 6.

So, the cost of 6 pairs of socks would be \$15.

Pairs of Socks		4	6
Cost in Dollars		10	■

Pairs of Socks	2	4	6
Cost in Dollars	5	10	15

$\div 2$ $\times 3$

 $\div 2$ $\times 3$

Exercises

For Exercises 1-2, use the ratio tables given to solve each problem.

- EXERCISE** Keewan bikes 6 miles in 30 minutes. At this rate, how long would it take him to bike 18 miles?

Distance Biked (mi)	6		18
Time (min)	30		■

- HOBBIES** Christine is making fleece blankets. 6 yards of fleece will make 2 blankets. How many blankets can she make with 9 yards of fleece?

Yards of Fleece		6	9
Number of Blankets		2	■