



6 Ratios and Proportions








Warm up


Write the following ratios:

cats to dogs $3:2$ $\frac{3}{2}$ 3 to 2

cats to mice $3:4$


dogs to cats to mice $2:3:4$




There are three brown mice to every 2 gray mice on Old McDonald's farm. If Old McDonald's cat caught all 18 brown mice, how many gray mice are on the farm?


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Write the proportion and solve.



Mrs. Collins was going to bake pumpkin spice muffins. She knew the recipe called for 2 cups of muffin mix, 12 ounces of pumpkin puree, and 1 cup water to make 24 muffins. Mrs. Collins wanted to make 30 muffins. How much of each ingredient would she need?

mix	2 c	$\div 4$	$\frac{3}{4}$	$\times 5$	$2\frac{1}{2}\text{ c}$
puree	12 oz	$\div 4$	3	$\times 5$	15 oz
water	1 c	$\div 4$	$\frac{1}{4}$	$\times 5$	$1\frac{1}{4}\text{ c}$
muffins	24	$\div 4$	6	$\times 5$	30





Write the proportion and solve.



The sum of two numbers is 52. Find the two numbers if the ratio of the two numbers is 4:9.

1 st #	16	4
2 nd #	36	9
Sum	52	13

$(4+9) \times 4 = 52$
 $(4+9) \times 9 = 117$

16, 36



Try This!



Hayley was going to make punch for the party the recipe she had made 12 servings and called for 2.5 cups of grape juice, 1 cup cranberry juice, and 2 cups of vanilla ice cream. Hayley wanted to make enough for 8 servings how much of each ingredient should she plan to add to the punch?



