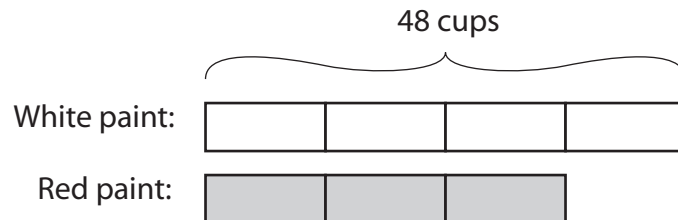


Solving Ratio Problems with Singapore-Style Strip Diagrams

1. In a pink paint mixture, the ratio of white to red paint is 4 to 3. Use the pictures below to help you answer the following questions about this paint.

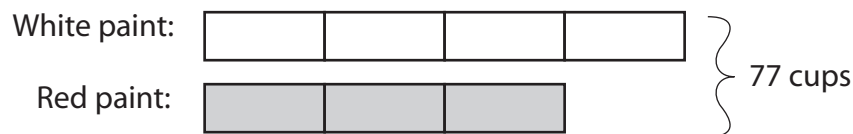
(a) To make the pink paint with 48 cups of white paint, how much red paint will you need? Answer: _____

How much pink paint will this make? Answer: _____



(b) To make a total of 77 cups of the pink paint, how many cups of white paint and how many cups of red paint will you need?

White paint: _____ Red paint: _____



(c) To make the pink paint with 45 cups of red paint, how many cups of white paint will you need? Answer: _____ How much pink paint will this make? Answer: _____

2. One day there were two choices for school lunch: pizza or spaghetti with meatballs. 2 out of every 3 students who got the school lunch chose pizza. 450 students got the school lunch.

How many students chose spaghetti with meatballs? Answer: _____

How many students chose pizza? Answer: _____



3. On the lunch menu one day there were two choices for school lunch: a corndog or meatloaf. 3 times as many students chose a corndog as chose meatloaf. 420 students got the school lunch.

How many students chose meatloaf? Answer: _____

How many students chose corndog? Answer: _____



4. Carlton makes 4 out of every 5 baskets he shoots. If Carlton wants to make 24 baskets, how many baskets should he shoot? You may draw a picture to help you solve the problem.

Answer: _____

5. Cassandra made 2 times as many baskets as Mary. Cassandra and Mary made 39 baskets together.

How many baskets did Mary make? Answer: _____

How many baskets did Cassandra make? Answer: _____

You may draw a picture to help you solve these problems.

6. To make a green paint, yellow paint and blue paint are mixed in a ratio of 5 : 3. This means that 5 cups of yellow paint are mixed with every 3 cups of blue paint. Show your work.

(a) To make the green paint with 30 cups of yellow paint, how many cups of blue paint will you need? Answer: _____

How much green paint will this make? Answer: _____

(b) To make green paint with 15 cups of blue paint, how many cups of red paint will you need? Answer: _____

How much green paint will this make? Answer: _____

(c) To make 24 cups of the green paint, how many cups of yellow paint and how many cups of blue paint will you need? Answer: _____