Ratios & Batches

Ratios & Rates

Name: _____ Date: _____ Grade 6

Three recipes for orange paint



Each drop shown = 1 drop of food coloring.

1. Use the diagrams to complete each pair of statements.

a Recipe A uses _____ drops of red and _____ drops of yellow. The ratio of red to yellow in Recipe A is _____ .

b Recipe B uses _____ drops of red and _____ drops of yellow. The ratio of red to yellow in Recipe B is _____ .

c Recipe C uses _____ drops of red and _____ drops of yellow. The ratio of red to yellow in Recipe C is _____ .

2. Which statement is true about the recipes?

A The quantities in Recipe B are double those of Recipe A.

B The quantities in Recipe C are double those of Recipe A.

C The quantities in Recipe A are double those of Recipe B.

D The quantities in Recipe B are double those of Recipe C.

3. Adding more yellow makes the orange paint lighter. Which recipe makes the lightest shade of orange? Explain your thinking.

4. What could be added to Recipe A so that its color matches Recipe C?

5. One batch of trail mix uses 2 parts pretzels, 3 parts cereal, and 1 part raisins. How many batches are shown in the diagram? Explain your thinking.

Pretzels 

Cereal 

Raisins 

6. A granola bar recipe mixes 3 cups of oats with 1 cup of honey.

a Draw a diagram that represents **doubling** the recipe.

Oats (cups)

Honey (cups)

b Draw a diagram that represents **tripling** the recipe.

Oats (cups)

Honey (cups)

7. In a fruit punch recipe, the ratio of cups of juice to cups of ginger ale is 3 : 2.

a Write the ratio of juice to ginger ale for a **double** batch. _____

b Write the ratio of juice to ginger ale for a **triple** batch. _____

8. To fill one bird feeder, Sam mixes 2 cups of sunflower seeds with 1 cup of millet.

a Sam has 4 bird feeders. What is the ratio of cups of sunflower seeds to cups of millet he needs to fill all 4? _____

b Sam says that to fill 3 feeders he needs 6 cups of sunflower seeds and 2 cups of millet. Is Sam correct? Explain your thinking.