

# Mixing Paint

## Lesson 2-12

DATE \_\_\_\_\_

TIME \_\_\_\_\_

### Math Message

- 1 Arturo is mixing paint colors for props in the school play. To make enough pink paint to cover one flamingo, he needs 3 cups of red paint and 2 cups of white paint.

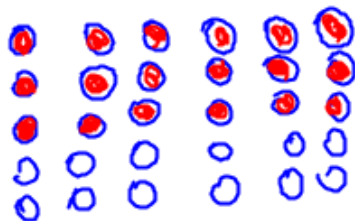
a. What is the ratio of red paint to white paint? \_\_\_\_\_

b. What is the ratio of red paint to total paint needed to cover one flamingo? \_\_\_\_\_

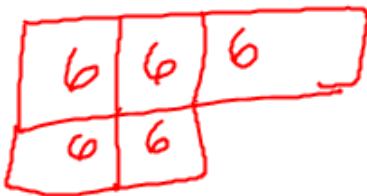
c. If Arturo paints 2 flamingos, how many cups of each color will he use? \_\_\_\_\_

d. If Arturo paints 6 flamingos, how many cups of each color will he use?

Draw a picture or diagram to help you solve this problem.



e. Show another way that you can solve the problem in Part d.



~~3 to 2~~ 3:2  $\frac{3}{2} = \frac{3 \cdot 1}{2 \cdot 1} = \frac{3}{2}$   $\frac{3 \cdot 2}{2 \cdot 2} = \frac{6}{4}$   
 $\frac{3 \cdot 3}{2 \cdot 3} = \frac{9}{6}$   
 $\frac{3 \cdot 6}{2 \cdot 6} = \frac{18}{12}$  18c Red  
12c White

# Blueberry Blast

## Lesson 2-12

NAME \_\_\_\_\_

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Use drawings or models to help you solve the problem. Show and label your work, and explain your reasoning.

The Crunchy Cereal Company is trying out recipes for its new Blueberry Blast cereal. Taste tests have shown that people prefer a cereal that has a strong blueberry taste. Below are four cereal recipes they tested. Use the table to answer the questions.

Cereal A	Cereal B	Cereal C	Cereal D
1 cup blueberries 2 cups cornflakes	2 cups blueberries 3 cups cornflakes	2 cups blueberries 4 cups cornflakes	5 cups blueberries 7 cups cornflakes

$1:2 \frac{1}{2} \quad 1+2 \quad 2:3 \frac{2}{3} \quad 2+3 \quad \frac{2}{4} \quad \frac{5}{7}$

- ① If the Crunchy Cereal Company wants a recipe that doubles the amount of blueberries and cornflakes in Cereal B, how much of each ingredient will they use?

$\frac{2}{3} = \frac{4}{6} \quad \frac{2}{3} \cdot 2 = \frac{4}{6}$   
 \_\_\_\_\_ 4 cups blueberries      \_\_\_\_\_ 6 cups cornflakes

- ② a. If the Crunchy Cereal Company makes 40 cups of Cereal B, how many cups of cornflakes and how many cups of blueberries do they use?

\_\_\_\_\_ 16 cups blueberries      \_\_\_\_\_ 24 cups cornflakes

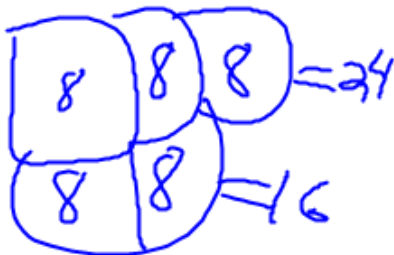
- b. Draw a picture or model to show how you solved the problem.

$\frac{2}{3} \frac{\text{Blue}}{\text{CF}}$

$\frac{\text{Blue}}{\text{total}} = \frac{2 \cdot 8}{5 \cdot 8} = \frac{16}{40}$   
 $\frac{\text{corn}}{\text{tot}} = \frac{3 \cdot 8}{5 \cdot 8} = \frac{24}{40}$

$\frac{2}{5} = \frac{x}{40}$   
 $5x = 80$   
 $\frac{5x}{5} = \frac{80}{5}$   
 $x = 16$

$8+8+8 = 24$   
 $5+5+5+5+5+5+5+5 = 40$   
 $2+2+2+2+2+2+2+2 = 16$



# Blueberry Blast (continued)

## Lesson 2-12

NAME \_\_\_\_\_

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- ③ Which of the four cereal mixes will taste the same? \_\_\_\_\_

Explain how you know.  $\frac{1}{2} \frac{2}{4}$   $\frac{1}{2} \cdot \frac{25}{25} = \frac{25}{50}$

- ④ a. If you started with Cereal D, how much of each ingredient would you ADD if you wanted it to taste exactly like Cereal B?  $\frac{5}{7}, \frac{4}{6}, \frac{8}{9}$  2

\_\_\_\_\_ cups blueberries \_\_\_\_\_ cups cornflakes

- b. Draw a picture or model to show how you solved the problem.

$$\frac{3}{5} = \frac{6}{10} \quad \frac{5}{7} = \frac{15}{21} \quad \frac{2}{3} = \frac{14}{21}$$

- c. Explain how your picture or model represents your solution to the problem.

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### Try This

- ⑤ After taste tests, the Crunchy Cereal Company needed a cereal with an even stronger blueberry taste. Design Cereal F to have a stronger blueberry taste than Cereals A–D.

Blueberries are expensive, so Cereal F must call for more cornflakes than blueberries.

Cereal F:  $\frac{6}{21}$  cups blueberries  $\frac{24}{7}$  cups cornflakes

Provide a mathematical argument for how you know your cereal has a stronger blueberry taste than Cereals A–D.

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1 Multiply or divide.

a.  $45 * \frac{1}{5} = \underline{\hspace{2cm}}$

b.  $60 \div 4 = \underline{\hspace{2cm}}$

c.  $\underline{\hspace{2cm}} = 56 * \frac{1}{8}$

d.  $\underline{\hspace{2cm}} = 108 \div 12$

SRB  
143-144  
100

SRB  
169-170

2 Name two fractions between  $\frac{5}{6}$  and  $\frac{5}{7}$ .

\_\_\_\_\_

3 The heights of five starting players on a basketball team, rounded to the nearest centimeter, are as follows:

173 cm, 191 cm, 178 cm, 185 cm,  
188 cm

Find the median: \_\_\_\_\_

Which is the best representation of this data set, the median or the mean?  
Explain.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SRB  
284  
289-290

SRB  
100

4 Which of the following fractions are equivalent to  $\frac{5}{6}$ ?

Fill in the circles next to all that apply.

A.  $\frac{10}{12}$

B.  $\frac{4}{5}$

C.  $\frac{20}{24}$

D.  $\frac{35}{40}$

5 How many  $\frac{3}{4}$ -inch segments are in a line segment that is  $3\frac{3}{4}$  inches long?

Answer: \_\_\_\_\_

Draw a picture to represent the problem.

SRB  
32

SRB  
106

6 Every 4 days, milk goes on sale at the grocery store. Every 7 days, eggs go on sale.

How often are both milk and eggs on sale?

Solution: \_\_\_\_\_