10-4 Ratios as Fractions

Digital Resources

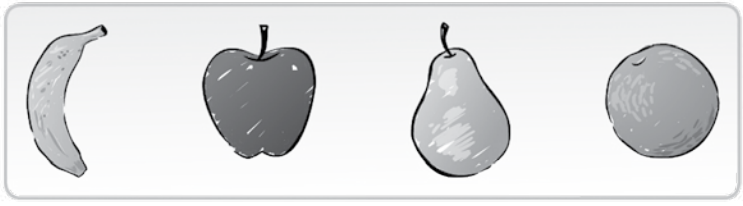
CCSS: 6.RP.A.1: Understand the concept of ratio and use ratio language to describe a relationship between two quantities. **6.RP.A.3:** Use ratio and rate reasoning to solve real-world and mathematical problems ... .

Launch

MP6, MP7

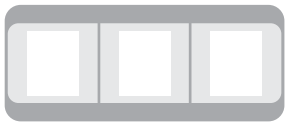
Due to high demand, a gift shop wants more fruit boxes with a 1 : 3 ratio of the number of apples to the total number of fruit.

Use letters to complete each plan. Write the fraction $\frac{\text{number of apples}}{\text{total number of fruit}}$. Cross out any plan that does not have the correct ratio.



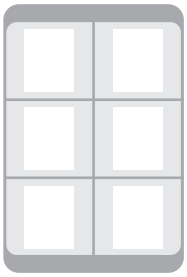
b = banana a = apple p = pear o = orange

Box Plan 1



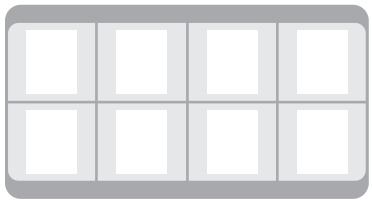
$\frac{\square}{\square}$ apples / fruit

Box Plan 2



$\frac{\square}{\square}$ apples / fruit

Box Plan 3



$\frac{\square}{\square}$ apples / fruit

Reflect How do the ratio and the fractions in the problem both describe the apples in the boxes?

Got It?

PART 1 Got It (1 of 2)

A school baseball team has 5 pitchers, 2 catchers, and 12 other fielders. Write the ratio of the number of pitchers to the total number of players in three ways.

PART 1 Got It (2 of 2)

Suppose you have a fruit box in which the ratio of the number of pears to the number of apples is $\frac{2}{3}$. Explain what this ratio tells you about the relationship between the types of fruit in the box.

Got It?

PART 2 Got It

Write two different ratios equivalent to $\frac{6}{8}$.

PART 3 Got It (1 of 2)

Write the ratio 12 to 40 in simplest form.

PART 3 Got It (2 of 2)

How can you determine whether a ratio is in simplest form?

Close and Check

Focus Question

MP2, MP3

Why might you want to write a ratio as a fraction?

Do you know HOW?

1. You propose a new mix of fruit for a fruit box. Write the ratio of apples to fruit (apples, pears, oranges, and mangoes) in three ways.

p	o	p
a	o	m

☐ to ☐

☐ : ☐

$\frac{\square}{\square}$

2. The ratio of rock songs to all songs on a playlist is $\frac{36}{60}$. Write this ratio in simplest form.

$\frac{\square}{\square}$

3. Circle the ratios that are equivalent to $\frac{36}{60}$.

$\frac{6}{10}$ $\frac{9}{15}$ $\frac{15}{20}$

$\frac{24}{36}$ $\frac{48}{80}$

Do you UNDERSTAND?

4. Writing Your class visits the zoo. Your friend says that the ratio of elephants to giraffes is $\frac{3}{8}$. You describe the relationship of elephants to giraffes as $\frac{9}{24}$. Can both you and your friend be correct? Explain.

5. Compare and Contrast How would the problem above have been the same or different if the ratios would have been written as 3 : 8 and 9 : 24? Explain.