# 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

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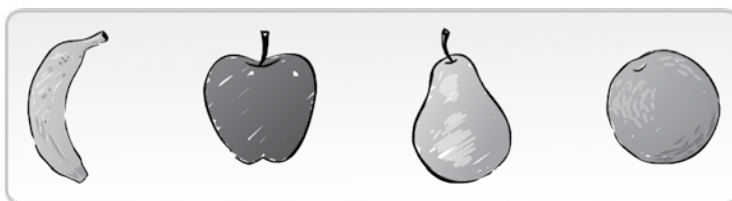
b = banana   a = apple   p = pear   o = orange

Box Plan 1

Box Plan 2

Box Plan 3

⬜ apples
⬜ fruit

⬜ apples
⬜ fruit

⬜ apples
⬜ fruit

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

Got It?

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.

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

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

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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 [ ]

[ ] : [ ]

[ ]
[ ]

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

[ ]
‾‾‾‾
[ ]

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.

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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.

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