

Are You Ready?

Review

Simplest Form

To write a fraction in simplest form, divide the numerator and the denominator by the greatest common factor (GCF).

A ratio is in simplest form when the greatest common factor of the numerator and the denominator is 1.

Example 1

There are 15 adults and 55 students on a field trip. Write the ratio of adults to students as a fraction in simplest form.

$$\frac{15}{55}$$

Write the fraction.

$$\frac{15 \div 5}{55 \div 5}$$

Divide by the GCF, 5.

$$\frac{3}{11}$$

Simplify.

Example 2

There are 7 girls and 8 boys that are going on a bike ride. Write the ratio of girls to boys in simplest form.

$$\frac{7}{8}$$

Write the fraction.

$$\frac{7}{8}$$

$\frac{7}{8}$ is in simplest form since the GCF of 7 and 8 is 1.

Exercises

At the close of the day at a food stand, the following items remained: 7 hot dogs, 4 coney dogs, 3 bags of chips, 6 bags of peanuts, 2 bags of popcorn, and 12 packs of sunflower seeds. Write each ratio as a fraction in simplest form.

- | | |
|--|----------|
| 1. coney dogs to hot dogs | 1. _____ |
| 2. bags of chips to bags of peanuts | 2. _____ |
| 3. bags of popcorn to packs of sunflower seeds | 3. _____ |
| 4. hot dogs to bags of peanuts | 4. _____ |
| 5. bags of popcorn to hot dogs | 5. _____ |
| 6. bags of chips to packs of sunflower seeds | 6. _____ |
| 7. bags of peanuts to coney dogs | 7. _____ |
| 8. hot dogs to bags of chips | 8. _____ |

Are You Ready?

Apply

<p>1. TRAVEL Kimberly traveled to her friend's house and went 300 miles in 5 hours. On her way home she took a different route and traveled 420 miles in 7 hours. Are these ratios equivalent?</p>	<p>2. TOMATOES On Monday Janine picked 20 tomatoes off 4 tomato plants. On Thursday she picked 15 tomatoes off 3 tomato plants. Determine whether the ratios are equivalent.</p>						
<p>3. BASKETBALL Daniel's basketball team won 23 games and lost 8 games. Write the ratio of wins to losses in simplest form.</p>	<p>4. MUSIC Mr. Jansen listened to 8 songs in 28 minutes. He later listened to 5 songs in 21 minutes. Determine whether the ratios are equivalent.</p>						
<p>5. MOVIE ATTENDANCE Friday night's movie attendance is shown in the table. Write the ratio of males to females in simplest form.</p> <table border="1"> <thead> <tr> <th colspan="2">Friday's Movie Attendance</th> </tr> </thead> <tbody> <tr> <td>Males</td> <td>58</td> </tr> <tr> <td>Females</td> <td>72</td> </tr> </tbody> </table>	Friday's Movie Attendance		Males	58	Females	72	<p>6. MOVIE ATTENDANCE Use the table in Exercise 5 to write the ratio of females to the total number of people attending Friday night's movie in simplest form.</p>
Friday's Movie Attendance							
Males	58						
Females	72						

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