

**Lesson Summary**

*Unit rate* is often a useful means for comparing ratios and their associated rates when measured in different units. The unit rate allows us to compare varying sizes of quantities by examining the number of units of one quantity per one unit of the second quantity. This value of the ratio is the unit rate.

**Problem Set**

- Find each rate and unit rate.
  - 420 miles in 7 hours
  - 360 customers in 30 days
  - 40 meters in 16 seconds
  - \$7.96 for 5 pounds
- Write three ratios that are equivalent to the one given: The ratio of right-handed students to left-handed students is 18:4.
- Mr. Rowley has 16 homework papers and 14 exit tickets to return. Ms. Rivera has 64 homework papers and 60 exit tickets to return. For each teacher, write a ratio to represent the number of homework papers to number of exit tickets they have to return. Are the ratios equivalent? Explain.
- Jonathan's parents told him that for every 5 hours of homework or reading he completes, he would be able to play 3 hours of video games. His friend Lucas's parents told their son that he could play 30 minutes for every hour of homework or reading time he completes. If both boys spend the same amount of time on homework and reading this week, which boy gets more time playing video games? How do you know?
- Of the 30 girls who tried out for the lacrosse team at Euclid Middle School, 12 were selected. Of the 40 boys who tried out, 16 were selected. Are the ratios of the number of students on the team to the number of students trying out the same for both boys and girls? How do you know?
- Devon is trying to find the unit price on a 6-pack of drinks on sale for \$2.99. His sister says that at that price, each drink would cost just over \$2.00. Is she correct, and how do you know? If she is not, how would Devon's sister find the correct price?
- Each year Lizzie's school purchases student agenda books, which are sold in the school store. This year, the school purchased 350 books at a cost of \$1,137.50. If the school would like to make a profit of \$1,500 to help pay for field trips and school activities, what is the least amount they can charge for each agenda book? Explain how you found your answer.