

Skill: Finding and Using Rates

Investigation 3

Comparing and Scaling

Write the unit rate for each situation.

1. travel 250 miles in 5 hours
2. earn \$75.20 in 8 hours
3. read 80 pages in 2 hours
4. type 8,580 words in 2 hours 45 minutes
5. manufacture 2,488 parts in 8 hours
6. 50 copies of a book on 2 shelves
7. \$30 for 6 books
8. 24 points in 3 games

Find each unit price. Then determine the better buy.

9. paper: 100 sheets for \$0.99
500 sheets for \$4.29
10. peanuts: 1 pound for \$1.29
12 ounces for \$0.95
11. crackers: 15 ounces for \$1.79
12 ounces for \$1.49
12. apples: 3 pounds for \$1.89
5 pounds for \$2.49
13. mechanical pencils: 4 for \$1.25
25 for \$5.69
14. bagels: 4 for \$0.89
6 for \$1.39

Skill: Finding and Using Rates *(continued)***Investigation 3****Comparing and Scaling**

15. a. Yolanda and Yoko ran in a 100-yd dash. When Yolanda crossed the finish line in 15 seconds, Yoko was 10 yards behind her. The girls then repeated the race, with Yolanda starting 10 yards behind the starting line. If each girl ran at the same rate as before, who won the race? By how many yards?
- b. Assume the girls run at the same rate as before. How far behind the starting line should Yolanda be in order for the two to finish in a tie?
16. During the breaststroke competitions of a recent Olympics, Nelson Diebel swam 100 meters in 62 seconds, and Mike Bowerman swam 200 meters in 130 seconds. Who swam at a faster rate?
17. During a vacation, the Vasquez family traveled 174 miles in 3 hours on Monday, and 290 miles in 5 hours on Tuesday. Write an equation relating miles m traveled to hours h .