Name: _____

5-7 Additional Practice

Scan for Multimedia

In 1–3, solve the rate problems.

1. Jason and his family travel 160 miles in 3.2 hours. If they continue at this constant speed, how long will it take them to travel 300 miles? Complete the table.

   It will take Jason and his family ____ hours to travel 300 miles.

Time (hours)	Distance (miles)
1	
3.2	160
	300

2. A space shuttle orbits Earth at a rate of about 4,375 miles in 15 minutes. At this rate, how far does the space shuttle travel around Earth in 1 hour?

3. A store sells 4 cans of beans for $9. What is the price of 7 cans of beans?

4. The new *Vigo the Vampire Hunter* novel is 520 pages. Skyler has read 145 pages in 5 hours. Ramon has read 124 pages in 4 hours.

   a. Who reads faster, Skyler or Ramon?

   b. How long will it take Ramon to read the entire novel if he continues to read at his current rate? Explain.

5. Hanna and Dien are both getting a raise. Who will earn more per hour after the raise?

	Hours Worked	Earnings	Raise (per hour)
Hanna	8	$78.00	$1.00
Dien	6	$60.60	$0.50

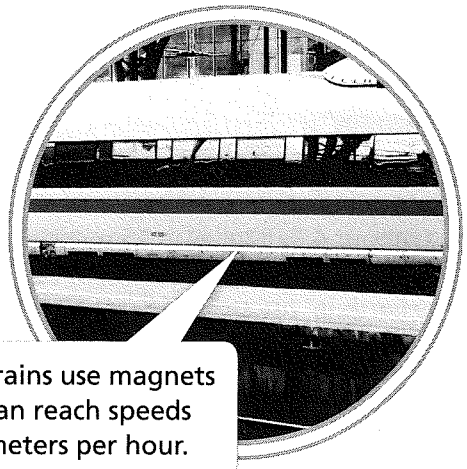
   a. How can you use unit prices to find Hanna's and Dien's new earnings per hour? Explain.

   b. Solve the problem.

6. **Model with Math** Kenny is walking at a constant speed of 3.5 miles per hour. How far can he walk in 6 hours? Complete the table. Then write an equation to find the total distance, d, traveled after t hours to solve the problem.

Time, t (hours)	1	2	3	4
Distance, d (miles)	3.5			

In 7 and 8, use the picture at the right.



Because maglev trains use magnets to levitate, they can reach speeds of up to 500 kilometers per hour.

7. If the maglev train travels at a constant speed of 480 kilometers per hour for $\frac{1}{4}$ hour, how far does the train travel?

8. If the maglev train traveled at a constant rate of its top speed for 10 kilometers, what is the approximate amount of time in hours the train would have traveled?

9. Cora babysat for $3\frac{1}{2}$ hours and charged \$28. At the same hourly rate, what would she charge for $5\frac{1}{2}$ hours of babysitting?

10. **Higher Order Thinking** A cyclist rode at a constant speed of 21 mph for 3 hours. Then she decreased her rate of speed to 17 mph for 4 hours. How far did the cyclist ride in 7 hours?

Assessment Practice

11. Jack drove 325 miles in 5 hours.

PART A

How many miles per hour did Jack drive?

PART B

Jack will drive 520 more miles at the same rate. How long will it take Jack to drive the 520 miles?