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**NAME**

**Module 16** Solving Rational Equations  
**Lesson 4** Solving Various Types of Problems  
 Using Rational Equations



**additional  
practice**

**Solve.**

1. Ted can wrap a present in 3 minutes. How many presents can he wrap in 15 minutes?

**5 presents**

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2. Tina can read 1.5 pages per minute. How many pages can she read in 20 minutes?

**30 pages**

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3. One trash truck can pick up Main Street's garbage in 20 minutes. Another trash truck can pick up Main Street's garbage in 30 minutes. If both trucks work together, how long will it take to pick up Main Street's garbage?

**12 minutes**

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4. A small bulldozer can clear a mound of earth in 5 hours. A larger bulldozer can clear the same mound of earth in 2 hours. If the small and large bulldozers work together, how long will it take to clear the mound of earth?

**$1\frac{3}{7}$  hours**

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5. When two welders work together, they can complete a job in 6 hours. One welder working alone can complete the job in 8 hours. How long would it take the other welder, working alone, to complete the job?

**24 hours**

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6. Working together, two hoses can fill a tank in 5 minutes. One hose, working alone, can fill the tank in 10 minutes. How long would it take for the other hose to fill the tank?

**10 minutes**

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7. In the same amount of time, Steve jogged 3 miles and Stacey walked 2 miles. Steve ran at a rate 2 miles per hour greater than Stacey's walking rate. What was Stacey's walking rate?

**4 miles per hour**

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8. Two tractor trailer drivers traveled two different routes starting and stopping at the same time. Bob drove at an average speed 3 miles per hour faster than Len's average speed. Bob drove 329 miles, and Len drove 308 miles. What were Bob's and Len's average speeds?

**Bob: 47 miles per hour; Len: 44 miles per hour**

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9. A cyclist warms up by riding his favorite 5-mile trail and then repeats the course at 3 times the speed. Altogether, the ride lasted 1 hour. What was the cyclist's rate of speed during his second pass?

**20 miles per hour**

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10. To train for a triathlon, Gary ran 12 miles, and then, he cycled 24 miles. His cycling rate was 4 times his running rate, and the entire workout lasted 3 hours. What was Gary's running rate?

**6 miles per hour**

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