

## Lesson 13 Practice Problems

1.
  - a. How can you find 50% of a number quickly in your head?
  
  - b. Andre lives 1.6 km from school. What is 50% of 1.6 km?
  - c. Diego lives  $\frac{1}{2}$  mile from school. What is 50% of  $\frac{1}{2}$  mile?
  
2. There is a 10% off sale on laptop computers. If someone saves \$35 on a laptop, what was its original cost? If you get stuck, consider using the table.

| savings (dollars) | percentage |
|-------------------|------------|
| 35                | 10         |
| ?                 | 100        |

3. Explain how to calculate these mentally.
  - a. 15 is what percentage of 30?
  
  - b. 3 is what percentage of 12?
  
  - c. 6 is what percentage of 10?

4. Noah says that to find 20% of a number he divides the number by 5. For example, 20% of 60 is 12, because  $60 \div 5 = 12$ . Does Noah's method always work? Explain why or why not.

5. Diego has 75% of \$10. Noah has 25% of \$30. Diego thinks he has more money than Noah, but Noah thinks they have an equal amount of money. Who is right? Explain your reasoning.

(From Unit 3, Lesson 10.)

6. Lin and Andre start walking toward each other at the same time from opposite ends of 22-mile walking trail. Lin walks at a speed of 2.5 miles per hour. Andre walks at a speed of 3 miles per hour.

Here is a table showing the distances traveled and how far apart Lin and Andre were over time. Use the table to find how much time passes before they meet.

| elapsed time (hour) | Lin's distance (miles) | Andre's distance (miles) | distance apart (miles) |
|---------------------|------------------------|--------------------------|------------------------|
| 0                   | 0                      | 0                        | 22                     |
| 1                   | 2.5                    | 3                        | 16.5                   |
|                     |                        |                          |                        |
|                     |                        |                          |                        |
|                     |                        |                          | 0                      |

(From Unit 3, Lesson 8.)