NAME   DATE   PERIOD

Unit 3, Lesson 13: Benchmark Percentages

1. a. How can you find 50% of a number quickly in your head? *Divide the number in half or multiply by 1/2.*

    b. Andre lives 1.6 km from school. What is 50% of 1.6 km?   *1.6 ÷ 2 = (.8 km)*

    c. Diego lives $\frac{1}{2}$ mile from school. What is 50% of $\frac{1}{2}$ mile?   *$\frac{1}{2} \times \frac{1}{2} = \left(\frac{1}{4}\right)$*   */3*

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.   *$350*

savings (dollars)	percentage
35	10
$350	100

×10 ... ×10   */1*

3. Explain how to calculate these mentally.

   a. 15 is what percentage of 30?   *$\frac{15}{30}$ = 50%   15 is half of 30*

   b. 3 is what percentage of 12?   *$\frac{3}{12}$ = $\frac{1}{4}$ = 25%*   */3*

   c. 6 is what percentage of 10?   *$\frac{6}{10}$ = 60%*

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 ÷ 5 = 12. Does Noah's method always work? Explain why or why not.
   Yes because 20% = 1/5 of a number   */1*

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.

   *75% of $10 = 7.50   ←
   1/4 is 2.50. so 3/4*

   *25% of $30 = 7.50
   1/4 is 7.50
   so yes,
   they are
   equal amounts.*   */1*

(from Unit 3, Lesson 10)   */9*

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