## Unit 3 Lesson 13: Benchmark Percentages

### 1 What Percentage Is Shaded? (Warm up)

#### Student Task Statement

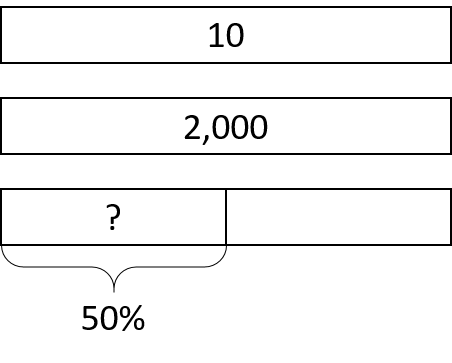
What percentage of each diagram is shaded?



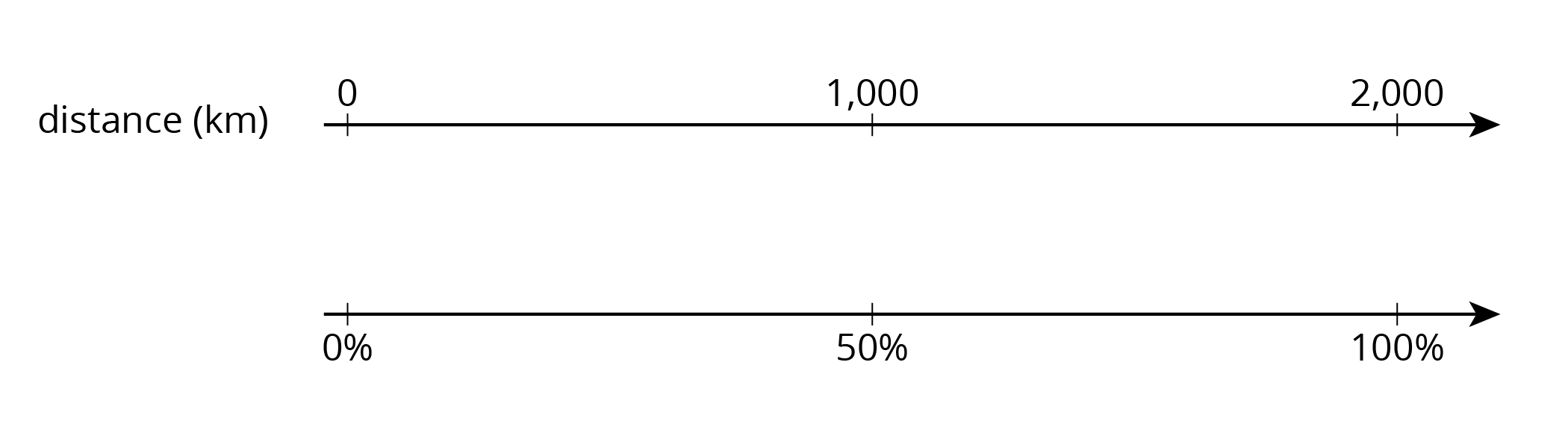
### 2 Liters, Meters, and Hours

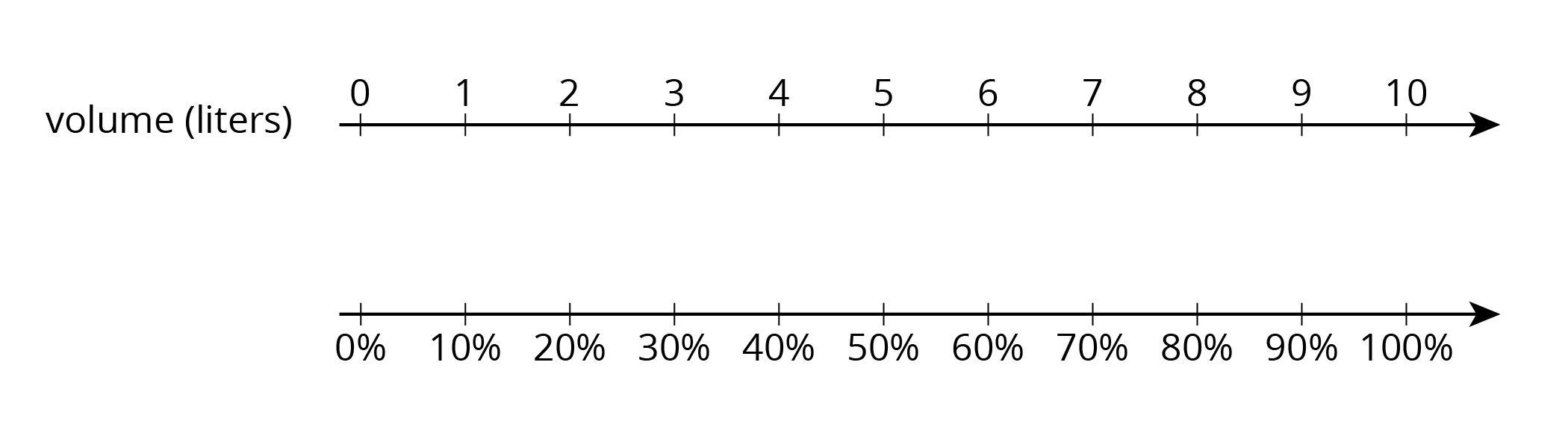
#### Student Task Statement

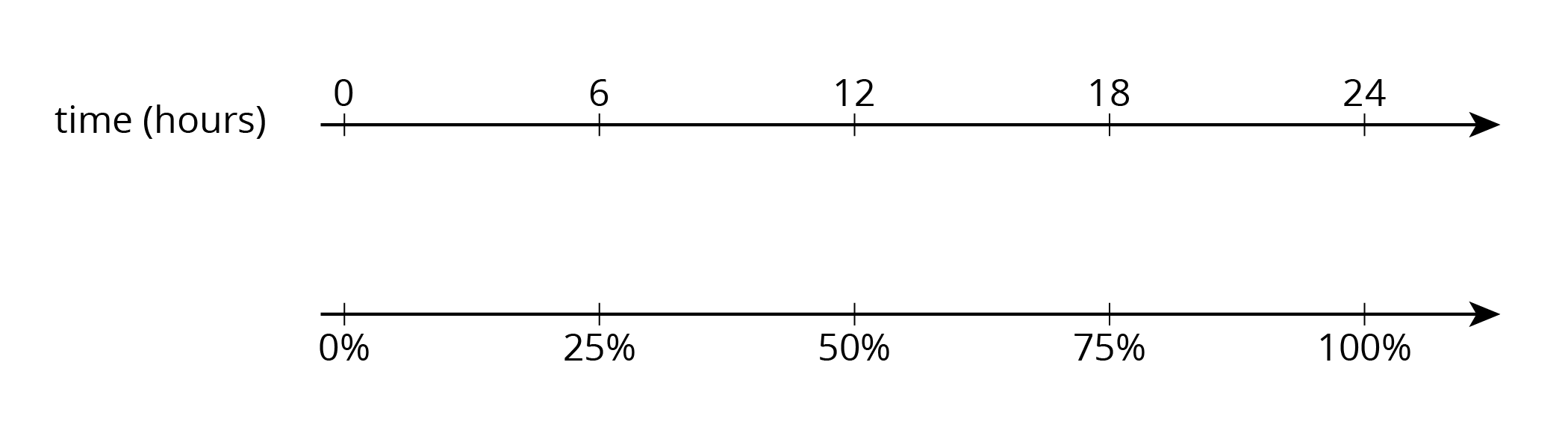
* 1. How much is 50% of 10 liters of milk?
  2. How far is 50% of a 2,000-kilometer trip?
  3. How long is 50% of a 24-hour day?
  4. How can you find 50% of any number?
  5. How far is 10% of a 2,000-kilometer trip?
  6. How much is 10% of 10 liters of milk?
  7. How long is 10% of a 24-hour day?
  8. How can you find 10% of any number?
  9. How long is 75% of a 24-hour day?
  10. How far is 75% of a 2,000-kilometer trip?
  11. How much is 75% of 10 liters of milk?
  12. How can you find 75% of any number?



#### Activity Synthesis





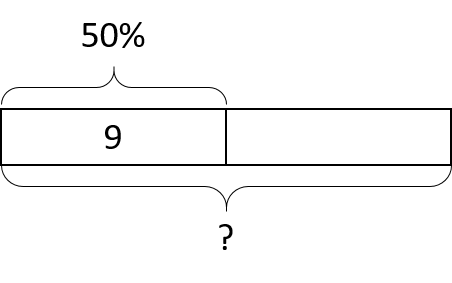


### 3 Nine is . . .

#### Student Task Statement

Explain how you can calculate each value mentally.

1. 9 is 50% of what number?
2. 9 is 25% of what number?
3. 9 is 10% of what number?
4. 9 is 75% of what number?
5. 9 is 150% of what number?



### 4 Matching the Percentage (Optional)

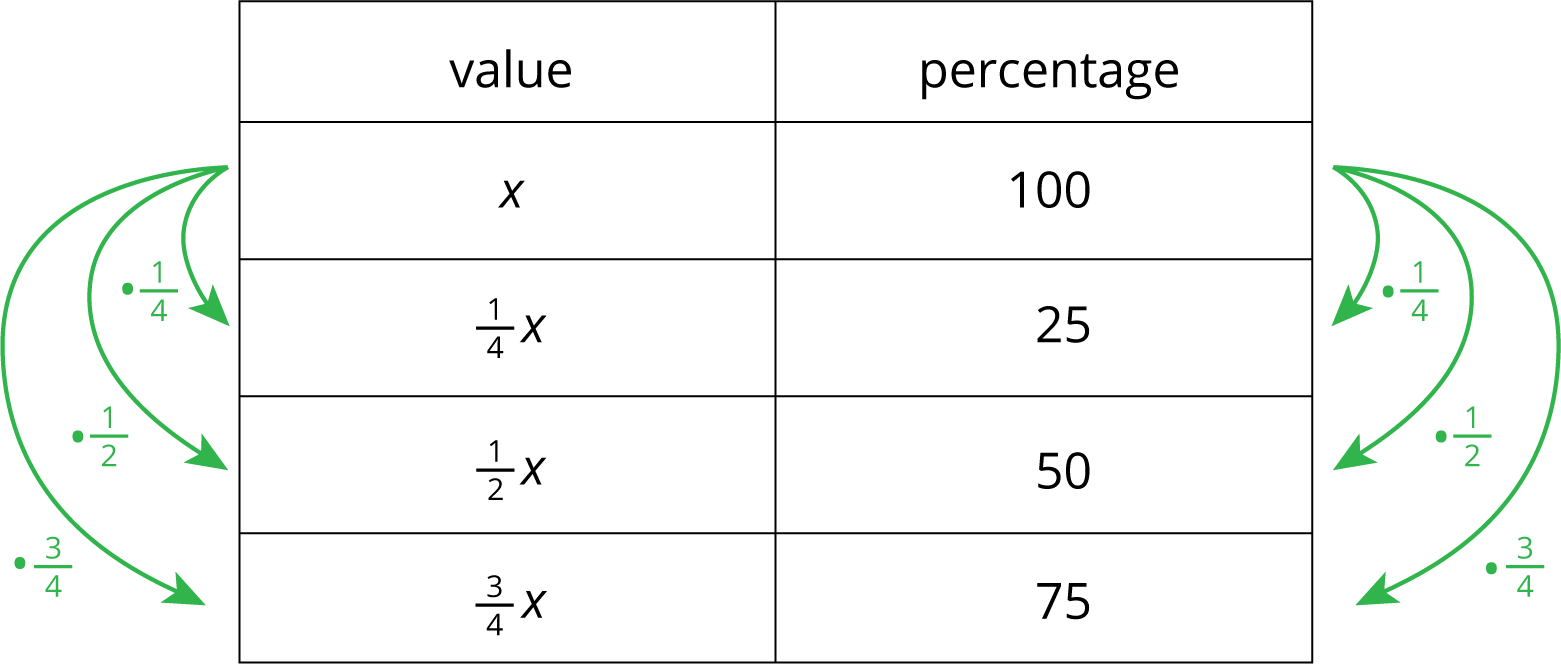
#### Student Task Statement

Match the percentage that describes the relationship between each pair of numbers. One percentage will be left over. Be prepared to explain your reasoning.

1. 7 is what percentage of 14?
2. 5 is what percentage of 20?
3. 3 is what percentage of 30?
4. 6 is what percentage of 8?
5. 20 is what percentage of 5?

* 4%
* 10%
* 25%
* 50%
* 75%
* 400%

#### Images for Activity Synthesis





© CC BY Open Up Resources. Adaptations CC BY IM.