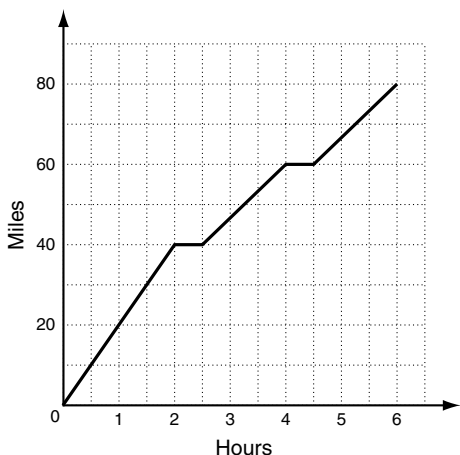


**CHAPTER 9** **Quiz**  
**Section A**

Select the best answer.

1. The graph below shows how far Tony traveled on his bicycle during a 6-hour trip. Which of the statements below is NOT true?



- A** Tony was moving for a total of 5 hours.  
**B** Tony was going the fastest during the first 2 hours.  
**C** Tony's average rate for the trip was between 12 and 13 miles per hour.  
**D** Tony rested twice.
2. Which words could be represented by the function  $h(t) = 50 + .05t$ ?
- F** The cost of a phone call is 5 cents plus an additional 5 cents per minute.  
**G** The cost of a phone call is 50 cents plus an additional 5 cents per minute.  
**H** The cost of a rental car is 50 dollars plus 5 cents per mile.  
**J** The cost of a rental car is 50 dollars plus 50 cents per mile.

3. Evaluate  $f(5)$  if

$$f(x) = \begin{cases} 2x & \text{if } x \leq 2 \\ 3x - 4 & \text{if } 2 < x \leq 5 \\ 4x - 7 & \text{if } x > 5 \end{cases}$$

- A**  $f(5) = 10$       **C**  $f(5) = 13$   
**B**  $f(5) = 11$       **D**  $f(5) = 15$

4. A car is driven 60 mph for 3 hours, 35 mph for the next 2 hours, and 50 mph for the 4 hours after that. Which function best represents the distance the car traveled?

**F**  $d(t) = \begin{cases} 60 & \text{if } 0 \leq t \leq 3 \\ 35 & \text{if } 3 < t \leq 5 \\ 50 & \text{if } 5 < t \leq 9 \end{cases}$

**G**  $d(t) = \begin{cases} 60t & \text{if } 0 \leq t \leq 3 \\ 35t & \text{if } 3 < t \leq 5 \\ 50t & \text{if } 5 < t \leq 9 \end{cases}$

**H**  $d(t) = \begin{cases} 60t & \text{if } 0 \leq t \leq 3 \\ 35t + 75 & \text{if } 3 < t \leq 5 \\ 50t & \text{if } 5 < t \leq 9 \end{cases}$

**J**  $d(t) = \begin{cases} 60t & \text{if } 0 \leq t \leq 3 \\ 35t + 180 & \text{if } 3 < t \leq 5 \\ 50t + 250 & \text{if } 5 < t \leq 9 \end{cases}$

5. Given  $f(x) = \begin{cases} 2x + 5 & \text{if } x > 0 \\ 3x - 5 & \text{if } x \leq 0 \end{cases}$ , which is the rule for  $g(x)$ , a horizontal translation of  $f(x)$  4 units right?

**A**  $g(x) = \begin{cases} 2x - 3 & \text{if } x > 0 \\ 3x - 17 & \text{if } x \leq 0 \end{cases}$

**B**  $g(x) = \begin{cases} 2x - 3 & \text{if } x > 4 \\ 3x - 17 & \text{if } x \leq 4 \end{cases}$

**C**  $g(x) = \begin{cases} 2x + 13 & \text{if } x > -4 \\ 3x + 7 & \text{if } x \leq -4 \end{cases}$

**D**  $g(x) = \begin{cases} 2x + 13 & \text{if } x > 0 \\ 3x + 7 & \text{if } x \leq 0 \end{cases}$

6.  $f(x) = \begin{cases} 2x + 5 & \text{if } x < 4 \\ 4x - 3 & \text{if } x \geq 4 \end{cases}$  and

$g(x) = f\left(\frac{1}{2}x\right)$ . What is  $g(x)$ ?

**F**  $g(x) = \begin{cases} x + 2.5 & \text{if } x < 2 \\ 2x - 1.5 & \text{if } x \geq 2 \end{cases}$

**G**  $g(x) = \begin{cases} x + 2.5 & \text{if } x < 8 \\ 2x - 1.5 & \text{if } x \geq 8 \end{cases}$

**H**  $g(x) = \begin{cases} x + 5 & \text{if } x < 2 \\ 2x - 3 & \text{if } x \geq 2 \end{cases}$

**J**  $g(x) = \begin{cases} x + 5 & \text{if } x < 8 \\ 2x - 3 & \text{if } x \geq 8 \end{cases}$

## Answer Key continued

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- 21. D
- 22. H
- 23. A
- 24. F
- 25. A
- 26. H
- 27. C
- 28. J
- 29. A
- 30. F
- 31. C
- 32. G
- 33. C
- 34. J
- 35. A
- 36. F
- 37. A

### CHAPTER 9

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#### Section Quiz: Section A

- 1. C
- 2. H
- 3. B
- 4. H
- 5. B
- 6. J

#### Section Quiz: Section B

- 1. D
- 2. J
- 3. D
- 4. F
- 5. D
- 6. F

- 7. A
- 8. H
- 9. B
- 10. J

#### Chapter Test Form A

- 1. A
- 2. B
- 3. C
- 4. B
- 5. D
- 6. C
- 7. A
- 8. C
- 9. A
- 10. C
- 11. B
- 12. B
- 13. D
- 14. A
- 15. B
- 16. C

#### Chapter Test Form B

- 1. D
- 2. H
- 3. C
- 4. J
- 5. D
- 6. H
- 7. A
- 8. G
- 9. B
- 10. H