

CHAPTER
2 **Section B**

Quiz

Select the best answer.

1. If $g(x)$ is a vertical translation 3 units up of $f(x) = 3x + 9$, what is the rule for $g(x)$?

- A $g(x) = 3x + 6$
- B $g(x) = 3x + 12$
- C $g(x) = 6x + 9$
- D $g(x) = 9x + 9$

2. If $g(x)$ is a horizontal stretch by a factor of 3 followed by a translation of 5 units up of $f(x) = -7x + 9$, what is the rule for $g(x)$?

- F $g(x) = -21x + 14$
- G $g(x) = -7x + 14$
- H $g(x) = -\frac{7}{3}x + 4$
- J $g(x) = -\frac{7}{3}x + 14$

3. Which equation best fits this data set?

x	1	2	3	5	6
y	5	8	8	11	15

- A $y = \frac{3}{2}x - \frac{1}{2}$
- B $y = 2x + 3$
- C $y = 3x + 2$
- D $y = 3$

4. Solve $-6x \leq 18$ AND $4x - 3 < 13$.

- F all real numbers
- G $\{x | x \geq -3\}$
- H $\{x | x < 4\}$
- J $\{x | -3x \leq x < 4\}$

5. Solve $|x + 7| = 11$.

- A $x = -18$
- B $x = -11$
- C $x = 4$
- D $x = 4$ or $x = -18$

6. Solve $\frac{|5x - 8|}{4} \leq 6$.

- F $\left\{x \mid x \leq \frac{32}{5}\right\}$
- G $\{x | -24 \leq x \leq 24\}$
- H $\left\{x \mid -\frac{16}{5} \leq x \leq \frac{32}{5}\right\}$
- J $\left\{x \mid \frac{2}{5} \leq x \leq \frac{14}{5}\right\}$

7. Which function has a vertex at $(-5, -7)$?

- A $f(x) = |x - 5| - 7$
- B $f(x) = |x - 5| + 7$
- C $f(x) = |x + 5| - 7$
- D $f(x) = |x + 7| - 5$

8. If $g(x)$ is a horizontal stretch by a factor of 3 of $f(x) = |x| - 4$, what is the rule for $g(x)$?

- F $g(x) = \frac{1}{3}|x| - 4$
- G $g(x) = 3|x| - 12$
- H $g(x) = 3|x| - 4$
- J $g(x) = 3|x| - \frac{4}{3}$

9. If $g(x)$ is a horizontal translation 6 units right of the absolute-value parent function, which is the rule for $g(x)$?

- A $g(x) = |x - 6|$
- B $g(x) = |x + 6|$
- C $g(x) = |x| - 6$
- D $g(x) = |x| + 6$

10. The graph of which function is the same as the graph of $f(x) = \left|\frac{1}{x}\right|$?

- F $g(x) = \left|-\frac{1}{x}\right|$
- G $g(x) = -\left|\frac{1}{x}\right|$
- H $g(x) = |-x|$
- J $g(x) = -|x|$

CHAPTER 2

Section Quiz: Section A

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

Section Quiz: Section B

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

Chapter Test Form A

1. B
2. A
3. C
4. A
5. C
6. B

7. C
8. A
9. B
10. A
11. B
12. B
13. D
14. B
15. D
16. B
17. D
18. B
19. C
20. A
21. D

Chapter Test Form B

1. B
2. H
3. C
4. F
5. C
6. H
7. C
8. G
9. A
10. F
11. C
12. J
13. A
14. F
15. A
16. H
17. C