Name _____ Date _____ Class _____

CHAPTER 2

Quiz

Lessons 2-6 Through 2-9

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 $g(x) = 6x + 9$

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 $g(x) = -\frac{7}{3}x + 4$

H $g(x) = -\frac{7}{3}x + 14$

3. Which equation best fits this data set?

x	1	2	3	5	6
y	5	7	9	13	15

A $y = \frac{3}{2}x - \frac{1}{2}$

B $y = 2x + 3$

C $y = 3x + 2$

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

F all real numbers

G $\{x | x \geq -3\}$

H $\{x | -3 \leq x < 4\}$

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

A $x = -18$

B $x = -11$

C $x = 4$ or $x = -18$

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

F $\left\{x \middle| x \leq \frac{32}{5}\right\}$

G $\{x | -24 \leq x \leq 24\}$

H $\left\{x \middle| -\frac{16}{5} \leq x \leq \frac{32}{5}\right\}$

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

A $f(x) = |x - 5| - 7$

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

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

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 $g(x) = 3|x| - 4$

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 $g(x) = |x| - 6$

CHAPTER 2

Section Quiz Lessons 2-6 Through 2-9

1. B

2. F

3. B

4. H

5. C

6. H

7. C

8. F

9. A