

Chapter 2 Quiz 2

Form G

Lessons 2-5 through 2-8

Do you know HOW?

1. Make a scatter plot of the data in the table. Write the equation of a trend line to model the relationship. Predict the value of y when $x = 9$.

x	1	3	5	7
y	2.3	2.9	3.3	3.8

Describe the transformations of $f(x)$ that produce $g(x)$.

2. $f(x) = x; g(x) = 2x - 1$
3. $f(x) = |x|; g(x) = \frac{1}{2}|x - 1|$
4. $f(x) = 3x; g(x) = x + \frac{2}{3}$
5. $f(x) = 2|x + 2| + 3; g(x) = 2|-x + 2|$

Graph each inequality.

6. $y > x - 5$
7. $y \leq |x - 2| + 4$

Do you UNDERSTAND?

8. **Writing** Suppose you have the graph of a function $y = f(x)$. Describe how the signs of h and k affect the graph of $y = f(x - h) + k$.
9. **Open-ended** Use the symbol $<$ or $>$ to write a linear inequality in two variables that has $(-2, -3)$ and $(5, 1)$ as solutions.