Algebra 1/2   Name _____

HW: Function Notation

Function notation is a useful way in mathematics to identify different equations. We use it as a formal way to show whether to EVALUATE (find the value) of a function, or SOLVE (for a variable).

Use the following functions to answer the problems below:

$$f(x) = 2x - 3 \qquad g(x) = \frac{-12}{x} \qquad m(x) = x^2 \qquad d(x) = 2(x - 3)$$

Here we will practice EVALUATING.

Example 1: Find $f(-3)$.   **Example 2:** Find $d(6)$.

You Try:

1. Find $f(5)$.   2. Find $g(-2)$.   3. Find $d(-5)$.

4. Find $m(5)$.   5. Find $m(-5)$.   6. Find $g(6)$.

7. Find $f(-4)$.   8. Find $d(11)$.   9. Find $m(-11)$.

Now, we will practice SOLVING using the following functions to answer the problems below:

$$f(x) = 2x - 3 \qquad\qquad g(x) = \frac{-12}{x} \qquad\qquad d(x) = 2(x - 3)$$

Example 1: Solve $f(x) = -11$

Example 2: Solve $g(x) = 6.$

You Try:

1. Solve $d(x) = -18$

2. Solve $f(x) = 15$.

3. Solve $g(x) = 3$.

4. Solve $d(x) = -22$.

Optional Challenge:

5. If $m(x) = x^2$, solve $m(x) = 144$

6. If $h(x) = x^2 - 5x + 3$, find $h(-7)$.

7. If $p(x) = \frac{2x-5}{3}$, find $p(18)$.

7. If $p(x) = \frac{2x-5}{3}$, solve $p(x) = -5$.