

Name 3.7

Alg. I

# Graph Linear Functions

I can use function notation.

Ch. 3 Quiz

Function Notation: Linear functions written by naming a function,  $f$ :  
 $f(x) = mx + b$ .  
 $f(x)$  is another name for  $y$ .  
It is read  $f$  of  $x$ .

Example 1:

$$\begin{aligned} 1) \quad h(x) &= -7x \\ h(x) &= -7 \times 7 = \boxed{49} \end{aligned}$$

Example 2/3:

$$\begin{aligned} 2) \quad f(x) &= 37x + 7 \\ 155 &= 37x + 7 \\ \underline{-7} \quad \quad \underline{-7} \\ 148 &= 37x \\ \underline{37} \quad \quad \underline{37} \\ x &= 4 \end{aligned}$$

In 1999, 4 years after 1995, the wolf population will be 155.

Family of functions: A group of functions with similar characteristics.

Parent Linear Function: The most basic linear function  $f(x) = x$ .

