U1D8 MCR 3UI **<u>Function Notation and Equivalent Algebraic Expressions</u>**

Warm Up:

Simplify and state restrictions for:

a) $\dfrac{3x}{6x^2-x-2}+\dfrac{2x}{10x^2-x-3}$

b) $\dfrac{6}{y}-\dfrac{4x-4}{3y^5}\times\dfrac{9y^4}{x^2-1}$

Function Notation

Function Notation allows us to _____ a function and _____ between them.

For example:

1. rather than $y=x^2-3x+4$

2. rather than $y=6x^2+x-2$

3. rather than $y=-5(x+2)(x-1)$

Calculate the following:

a) $f(2)$ if $f(x)=x^2-3x+4$

b). $h(-1)$ if $h(x)=-5(x+2)(x-1)$

Equivalent Algebraic Expressions

Determine whether g(x) is the simplified version of f(x). If it is, then state the restrictions needed.

1. $f(x)=\dfrac{x^2-2x-15}{x^2-x-20}$ and $g(x)=\dfrac{x+3}{x+4}$

2. $f(x)=\dfrac{6x^2+x-2}{2x-1}$ and $g(x)=\dfrac{3x^2-x-2}{x-1}$

3. $f(x)=(x+2)(x-1)-(x+1)(x-4)$ and $g(x)=4x-1$

U1D8 HW: Pg. 179 #6-10(ac of each), Handout 1-1