Functions and their Representations

Simplifying Expressions with Function Notation

Example: Simplify the following expressions if $f(x)=x^2-4x+7$

a) f(-x)

b) -f(x)

c) f(2x)

d) 2f(x)

Example: Simplify the following expressions if $f(x)=x^2-4x+7$

a)
$$f(x+1)$$

b)
$$f(x)+1$$

Example: Simplify the following expressions if $g(t) = \frac{t}{t+3}$

a)
$$-3g(1-t)$$

b)
$$g(-2t)+1$$

Example: Simplify the following expressions if $r(x) = \sqrt{5-3x}$

a)
$$r(3t-4)$$

b)
$$5r(x+2)+4$$