

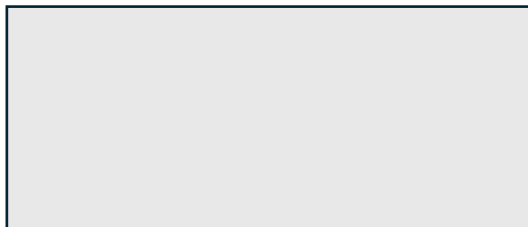
Difference Quotient**Review – Evaluating a Function**

Do: given _____, evaluate the following:

$$f(2) =$$

$$f(3 - x) =$$

Now try:

Difference Quotient Formula:

be able to evaluate/simplify – you will NOT be asked to memorize difference quotient this semester

ex. determine the difference quotient given

Step 1: evaluate

Step 2: plug _____ and _____ into formula

Step 3: simplify using _____ and _____

GOAL:

Do: given

fully simplify $f(x+h) =$

fully simplify $f(x+h) - f(x) =$

simplify difference quotient s.t. factor of h in denominator cancels out: