Class Discussion

Unit 1 Topic 4 Part 1 rigid transformation

Objective:

Introduction of transformations

horizontal translation	$h(x) = f(x - h)$
vertical translation	$h(x) = f(x) + k$
Reflection about x-axis	$h(x) = -f(x)$
Reflection about y-axis	$h(x) = f(-x)$

Ex1: Given $f(x) = (x + 2)^2$, graph $h(x)$ if

(a) $h(x) = f(x - 3)$

(b) $h(x) = f(x) - 2$

(c) $h(x) = -f(x)$

(d) $h(x) = f(-x)$

Ex2: Given the graph of $f(x)$ (see the graph) and $h(x) = -f(x - 3) + 1$, graph $h(x)$