

Name:

"Sketching by Translation"

W.S-11

Complete each row of the following table with the appropriate set of information, then trace figure:

Basic function	Translated function	Relating: $f(x)$ & $f_i(x)$	Translation vector
$f(x) = x^2$	$f_1(x) = x^2 + 1$		$\vec{u}_1 = \dots \vec{i} + \dots \vec{j}$
	$f_2(x) = (x - 2)^2$		$\vec{u}_2 = \dots \vec{i} + \dots \vec{j}$
		$f_3(x) = f(x) - 2$	$\vec{u}_3 = \dots \vec{i} + \dots \vec{j}$
		$f_4(x) = f(x - 1) + 3$	$\vec{u}_4 = \dots \vec{i} + \dots \vec{j}$
	$f_5(x) = x^2 - 2x + 1$		$\vec{u}_5 = \dots \vec{i} + \dots \vec{j}$
	$f_6(x) = x^2 - 6x + 7$		$\vec{u}_6 = \dots \vec{i} + \dots \vec{j}$
	$f_7(x) = x^2 + 4x$		$\vec{u}_7 = \dots \vec{i} + \dots \vec{j}$
			$\vec{u}_8 = -\vec{j}$
$g(x) = \sqrt{x}$	$g_1(x) = \sqrt{x+1}$		$\vec{w}_1 = \dots \vec{i} + \dots \vec{j}$
		$g(x) = g_2(x) + 2$	$\vec{w}_2 = \dots \vec{i} + \dots \vec{j}$
	$g_3(x) = \sqrt{x} - 1$		$\vec{w}_3 = \dots \vec{i} + \dots \vec{j}$
		$g(x) = g_4(x+1) - 3$	$\vec{w}_4 = \dots \vec{i} + \dots \vec{j}$
			$\vec{w}_5 = -3\vec{i} + \vec{j}$

