Rigid Translation Practice

This is practice for the analytic view of rigid translations.

If you are having trouble figuring out how this works, try watching these videos for an explanation!

YouTube link: https://www.youtube.com/watch?v=nWBnfpSbjQw

YouTube link: https://www.youtube.com/watch?v=2D_Fbegjm7I

Problem 1 *Consider the translation of the function $f(x)$ given by*

$$g(x) = f(x - 6) + (-7).$$

If the point $(2, 4)$ is on the graph of $f(x)$, what point must be on the graph of $g(x)$? ($\boxed{8}$, $\boxed{-3}$).

Problem 2 *Consider the translation of the function $f(x)$ given by*

$$g(x) = f(x + 1) + (-8).$$

If the point $(-10, 4)$ is on the graph of $f(x)$, what point must be on the graph of $g(x)$? ($\boxed{-11}$, $\boxed{-4}$).

Problem 3 *Consider the translation of the function $f(x)$ given by*

$$g(x) = f(x + 9) + (4).$$

If the point $(-9, -5)$ is on the graph of $f(x)$, what point must be on the graph of $g(x)$? ($\boxed{-18}$, $\boxed{-1}$).

Problem 4 *Consider the translation of the function $f(x)$ given by*

$$g(x) = f(x + 3) + (0).$$

If the point $(9, 3)$ is on the graph of $f(x)$, what point must be on the graph of $g(x)$? ($\boxed{6}$, $\boxed{3}$).

Learning outcomes: