Checkpoint 1.1: Evaluating Functions

Instruction

For the function $f(x) = x^2 - 3x + 5$ evaluate

    (a) $f(1)$

    (b) $f(a + h)$

Solution

    (a) $f(1) = 1^2 - 3 \cdot 1 + 5 = 1 - 3 + 5 = 3$.

    (b) $f(a + h) = (a + h)^2 - 3(a + h) + 5 = a^2 + 2ah + h^2 - 3a - 3h + 5$.

Answer

    (a) $f(1) = 3$.

    (b) $f(a + h) = a^2 + 2ah + h^2 - 3a - 3h + 5$.