

次の漸化式を解け。

$$(1) a_{n+1} = a_n + 6n^2 - 2n, a_1 = 1$$

$$(2) a_{n+1} = a_n + 3^{n+1}, a_1 = 1$$

$$(3) a_{n+2} + 2a_{n+1} - 8a_n = 0, a_1 = 1, a_2 = 3$$

$$(4) a_{n+2} = 8a_{n+1} - 16a_n, a_1 = 1, a_2 = 2$$