Problem

Find functions defined on the set of nonnegative integers that define the sequences whose first six terms are given below.

a. $1, -\dfrac{1}{3}, \dfrac{1}{5}, -\dfrac{1}{7}, \dfrac{1}{9}, -\dfrac{1}{11}$

b. 0, −2, 4, −6, 8, −10

Step-by-step solution

Step 1 of 2

(a) $1, \dfrac{-1}{3}, \dfrac{1}{5}, \dfrac{-1}{7}, \dfrac{1}{9}, \dfrac{-1}{11} \ldots\ldots\ldots = \left\{ \dfrac{(-1)^{n}}{2n+1} \mid n = 0, 1, 2, \ldots\ldots \right\}$

Step 2 of 2

(b) $0, -2, 4, -6, 8, \ldots\ldots\ldots = \left\{ (-1)^{n}.2n \mid n = 0, 1, 2, \ldots \right\}$