

Exercise 3a:

1. Find $f(2)$, $f(3)$, $f(4)$, and $f(5)$ if f is defined recursively by $f(0) = f(1) = 1$ and for $n = 1, 2, \dots$

a) $f(n+1) = f(n) - f(n-1)$.

b) $f(n+1) = f(n)f(n-1)$.

2. Give a recursive definition of the sequence $\{a_n\}$, $n = 1, 2, 3, \dots$ if

a) $a_n = 4n - 2$.

b) $a_n = 1 + (-1)^n$.