

**Recursive Definition** Suppose that  $f : \mathbb{N} \rightarrow \mathbb{N}$  is defined by

$$f(0) = 2$$

$$f(1) = 3$$

$$f(n) = 3f(n - 1) - 2f(n - 2) \text{ for all } n \geq 2.$$

**Solution:**

**Unrolling**

$T : \mathbb{Z}^+ \rightarrow \mathbb{Z}^+$  defined by

$$T(1) = 1$$

$$T(n) = 2T(n - 1) + 3$$

**Solution:**