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

BASE CASE: $a_1 = 0$

RECURSIVE CASE: $a_{n+1} = a_n + ?$

$$a_{n+1} = 1 + (-)^{n+1}$$
$$= 1 + (-1)^n(-1)$$
$$= 1 + (((-1)^n + 1) - 1)(-1)$$
$$= 1 + (a_n - 1)(-1)$$
$$= \boxed{2 - a_n}$$

c) $a_n = n(n+1)$

base case: $a_1 = 2$

$a_{n+1} = a_n + ?$

$? = a_{n+1} - a_n$

$= (n+1)((n+1)+1) - n(n+1)$

$= (n+1)(n+1) + n + 1 - n^2 - n$

$= n^2 + 2n + 1 - n^2 + 1$

$= 2n + 2$

$\boxed{a_{n+1} = a_n + 2n + 2}$

d) $a_n = n^2$

BASE CASE: $a_1 = 1$

RECURSIVE CASE: $a_{n+1} = a_n + ?$

$? = a_{n+1} - a_n = (n+1)^2 - n^2 = n^2 + 2n + 1 - n^2$

$= 2n + 1$

$\boxed{a_{n+1} = a_n + 2n + 1}$