

# SUITES NUMERIQUES SÉRIE 1

Activités mentales et automatismes  
IREM de Clermont Ferrand

Pour chaque suite,  
calculer le terme demandé  
et préciser la valeur  
donnée à  $n$ .

**N°1**

$$v_{n+1} = 2v_n - 3$$

$$v_4 = 2$$

Calculer  $v_5$ .

N°2

$$v_n = 2n - 5$$

Calculer  $v_5$ .

**N°3**

$$u_n = u_{n-1} + 5$$

$$u_2 = 3$$

Calculer  $u_3$ .

**N°4**

$$u_n = 2u_{n-1} + 2n + 1$$

$$u_3 = 1$$

Calculer  $u_4$ .

N°5

$$u_{n+1} = 5n + 3$$

Calculer  $u_6$ .

N°6

$$w_n = 5n - 2w_{n-1}$$

$$w_5 = 3$$

Calculer  $w_6$ .



N°7

$$u_n = 3(n + 1) - 5$$

Calculer  $u_7$ .

**N°8**

$$u_{n+1} = n^2 + 2(n + 1)$$

Calculer  $u_5$ .

N°9

$$v_n = nv_{n-1}$$

$$v_7 = 3$$

Calculer  $v_8$ .

# N°10

$$v_{n+1} = v_{n-1} + 3n$$

$$v_2 = -5$$

Calculer  $v_4$ .

**CORRECTION**

**N°1**

$$v_{n+1} = 2v_n - 3$$

$$v_4 = 2$$

$$n = 4$$

$$v_5 = 2v_4 - 3 = 1$$

N°2

$$v_n = 2n - 5$$

$$n = 5$$

$$v_5 = 2 \times 5 - 5 = 5$$

N°3

$$u_n = u_{n-1} + 5$$

$$u_2 = 3$$

$$n = 3$$

$$u_3 = u_2 + 5 = 8$$



**N°4**

$$u_n = 2u_{n-1} + 2n + 1$$

$$u_3 = 1$$

$$n = 4$$

$$u_4 = 2 \times u_3 + 2 \times 4 + 1 = 11$$

N°5

$$u_{n+1} = 5n + 3$$

$$n = 5$$

$$u_6 = 5 \times 5 + 3 = 28$$

N°6

$$w_n = 5n - 2w_{n-1}$$

$$w_5 = 3$$

$$n = 6$$

$$w_6 = 5 \times 6 - 2 \times w_5 = 24$$

Nº7

$$u_n = 3(n + 1) - 5$$

$$n = 7$$

$$u_7 = 3 \times 8 - 5 = 19$$

**N°8**

$$u_{n+1} = n^2 + 2(n + 1)$$

$$n = 4$$

$$u_5 = 4^2 + 2 \times 5 = 26$$

N°9

$$v_n = nv_{n-1}$$

$$v_7 = 3$$

$$n = 8$$

$$v_8 = 8 \times v_7 = 24$$

# N°10

$$v_{n+1} = v_{n-1} + 3n$$

$$v_2 = -5$$

$$n = 3$$

$$v_4 = v_2 + 3 \times 3 = 4$$

**FIN**