

$$\textcircled{1} \quad b_1 = 0,25$$

$$b_2 = 0,25 \cdot 4 = 1$$

$$b_3 = 1 \cdot 4 = 4$$

$$b_4 = 4 \cdot 4 = 16$$

$$b_5 = 16 \cdot 4 = 64$$

$$b_6 = 64 \cdot 4 = 256$$

RESPOSTA \textcircled{B}

$$\textcircled{2} \quad a_n = a_{k+1} = a_k + 4$$

$$a_n = a_2 = a_1 + 4$$

$$a_n = a_3 = a_2 + 4 \dots$$

$$a_n = 25, 29, 33, 37, 41 \dots$$

$$\textcircled{3} \quad a_1 = +\frac{2}{3}, \quad a_{k+1} - a_k = -\frac{1}{2}$$

$$\frac{2}{3} + a_2 - a_2 - \frac{1}{2} = \frac{1}{6}$$

$$\frac{1}{6} + a_3 - a_3 - \frac{1}{2} = -\frac{1}{3}$$

$$-\frac{1}{3} + a_3 - a_3 - \frac{1}{2} = -\frac{5}{6}$$

$$-\frac{5}{6} + a_5 - a_5 - \frac{1}{2} = -\frac{4}{3}$$

RESPOESTA (D)

(4) $a_1 = 4, r = 3$

$$4 \cdot 3^{n-1}$$

RAZON

$$n = 1$$

$$3$$

RESPOESTA (C)

$$\textcircled{5} \sum_{n=1}^9 \frac{3n-1}{n}$$

$$\frac{3 \times 1 - 1}{1} = \frac{3 - 1}{1} = \frac{2}{1} = 2$$

$$\frac{3 \times 2 - 1}{2} = \frac{6 - 1}{2} = \frac{5}{2} = 2,5$$

$$\frac{3 \times 3 - 1}{3} = \frac{9 - 1}{3} = \frac{8}{3} = 2,6$$

$$\frac{3 \times 4 - 1}{4} = \frac{12 - 1}{4} = \frac{11}{4} = 2,75$$

$$\frac{3 \times 5 - 1}{5} = \frac{15 - 1}{5} = \frac{14}{5} = 2,8$$

$$\frac{3 \times 6 - 1}{6} = \frac{18 - 1}{6} = \frac{17}{6} = 2,83$$

$$\frac{3 \times 7 - 1}{7} = \frac{21 - 1}{7} = \frac{20}{7} = 2,857142$$

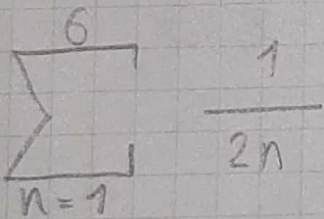
$$\frac{3 \times 8 - 1}{8} = \frac{24 - 1}{8} = \frac{23}{8} = 2,875$$

$$\frac{3 \times 9 - 1}{9} = \frac{27 - 1}{9} = \frac{26}{9} = 2,8$$

$$\frac{2}{1} + \frac{5}{2} + \frac{8}{3} + \frac{11}{4} + \frac{14}{5} + \frac{17}{6} + \frac{20}{7} + \frac{23}{8} + \frac{26}{9} = \frac{60911}{2520}$$

Respuesta (A)

(6)


$$\frac{1}{2n}$$

$$\frac{1}{2 \times 1} = \frac{1}{2} = 0,5$$

$$\frac{1}{2 \times 2} = \frac{1}{4} = 0,25$$

$$\frac{1}{2 \times 3} = \frac{1}{6} = 0,16$$

$$\frac{1}{2 \times 4} = \frac{1}{8} = 0,125$$

$$\frac{1}{2 \times 5} = \frac{1}{10} = 0,1$$

$$\frac{1}{2 \times 6} = \frac{1}{12} = 0,083$$

$$0,5 + 0,25 + 0,16 + 0,125 + 0,1 + 0,083 = 1,218$$

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Respuesta (D)

1,22

$$\textcircled{7} \quad \sum_{n=1}^5 \left(\frac{2}{7}\right)^{n-1}$$

$$1 + \frac{2}{7} + \frac{4}{49} + \frac{8}{343} + \frac{16}{2401} = \frac{3355}{2401}$$

RESPUESTA (A)

$$\begin{array}{r} 695.0050 \\ - 5150.050 \\ \hline 1'800.000 \end{array} +$$

RESPUESTA (D)

$$S_n = \frac{a(4^n - 1)}{4 - 1} = 6.5461$$

$$S_1 = \frac{1(4^1 - 1)}{4 - 1} = 1$$

$$S_5 = \frac{1(4^5 - 1)}{4 - 1} = 341$$

$$S_2 = \frac{1(4^2 - 1)}{4 - 1} = 3$$

$$S_6 = \frac{1(4^6 - 1)}{4 - 1} = 1.365$$

$$S_3 = \frac{1(4^3 - 1)}{4 - 1} = 21$$

$$S_7 = \frac{1(4^7 - 1)}{4 - 1} = 5.461$$

$$S_4 = \frac{1(4^4 - 1)}{4 - 1} = 85$$

RESPUESTA (A)