

**Solución Evaluación**

1  $b_1 = 0,25$   
 $b_2 = 0,25 \cdot 4 = 1$   
 $b_3 = 1 \cdot 4 = 4$   
 $b_4 = 4 \cdot 4 = 16$   
 $b_5 = 16 \cdot 4 = 64$   
 $b_6 = 64 \cdot 4 = 256$

2  $a_1 = 25 + 4 = 29$   
 $a_2 = 29 + 4 = 33$   
 $a_3 = 33 + 4 = 37$   
 $a_4 = 37 + 4 = 41$   
 $a_5 = 41 + 4 = 45$

3  $\frac{2}{3} + k = \frac{1}{2} + \frac{2}{3}$   
 $\frac{2}{3} \quad \frac{1}{2} \quad \frac{1}{3} \quad \frac{5}{6} \quad \frac{4}{3}$

4  $u \cdot 3^{n-1}$       Razon = 3  
 $n=1$   
 $a_1 = 4$

5  $\sum_{n=1}^9 \frac{3n-1}{n} = \frac{3-1}{1} + \frac{6-1}{2} + \frac{9-1}{3} + \frac{12-1}{4} + \frac{15-1}{5} + \dots$   
 $\frac{2}{1} + \frac{5}{2} + \frac{8}{3} + \frac{11}{4} + \frac{14}{5} + \dots$   
 $\frac{2}{1} + \frac{5}{2} + \frac{8}{3} + \frac{11}{4} + \frac{14}{5} + \frac{17}{6} + \frac{20}{7} + \frac{23}{8} + \frac{26}{9}$   
 $\frac{2}{1} + \frac{65}{72} + \frac{169}{720} + \frac{324}{5670} + \frac{26}{9}$   
 $\frac{238}{24} + \frac{79094}{7680} + \frac{26}{9}$   
 $\frac{858096}{40320} + \frac{26}{9}$   
 $\frac{60911}{2520}$

6  $\frac{1}{2} + \frac{1}{4} + \frac{1}{6} + \frac{1}{8} + \frac{1}{10} + \frac{1}{12} = \frac{6}{60} + \frac{15}{60} + \frac{10}{60} + \frac{7.5}{60} + \frac{6}{60} + \frac{5}{60}$   
 $= \frac{49.5}{60} = \frac{99}{120} = \frac{33}{40} = 0.825$

7  $(\frac{2}{7}) + (\frac{2}{7})^2 + (\frac{2}{7})^3 + (\frac{2}{7})^4$   
 $\frac{2}{7} + \frac{4}{49} + \frac{8}{343} + \frac{16}{2401}$   
 $= \frac{28}{49} + \frac{1764}{76807} + \frac{76}{2047} = \frac{557032}{823543} + \frac{76}{2047}$

8  $\frac{6,450,050}{5,150,050} = \frac{7,800,000}{7,800,000}$

9  $\frac{7 \cdot (4^7 - 1)}{4 - 1} = \frac{7(16384 - 1)}{3} = \frac{7 \cdot 16383}{3} = 16383$

10  $\frac{0.6}{1.6} = 0.6 \cdot \frac{8}{8} = 0.6 \cdot 8 = 4.8$   
 $\frac{0.6(2.6^8 - 1)}{2.6 - 1} = 0.6 \cdot (2.6^8 - 1)$   
 $\frac{0.6 \cdot 2556}{1.6} = \frac{1533.6}{1.6} = 958.5$