

20Сумата $2 + \frac{2}{3} + \frac{2}{9} + \frac{2}{27} + \dots$ изнесува:

А. $\frac{3}{2}$

Б. 3

В. $\frac{80}{27}$

Г. ∞

$$2 + \frac{2}{3} + \frac{2}{9} + \frac{2}{27} = 2 + \frac{a_1}{1-q}; \quad a_1 = \frac{2}{3}, q = \frac{a_2}{a_1} = \frac{\frac{2}{9}}{\frac{2}{3}} = \frac{1}{3}$$

$$2 + \frac{2}{3} + \frac{2}{9} + \frac{2}{27} = 2 + \frac{a_1}{1-q} = 2 + \frac{\frac{2}{3}}{1-\frac{1}{3}} = 2 + 1 = 3$$