Question

All of the following are geometric series. Which of them has first term $a = 1/3$ and common ratio $r = 3/8$?
(There may be more than one correct answer.)

A. $\displaystyle\sum_{n=0}^{\infty} \frac{1}{3}\left(\frac{3}{8}\right)^{n-1}$

B. $\displaystyle\sum_{n=0}^{\infty} \frac{3^{n-1}}{8^n}$

C. $\displaystyle\sum_{n=1}^{\infty} \frac{1}{3}\left(\frac{3}{8}\right)^{n-1}$

D. $\displaystyle\frac{1}{3} + \frac{1}{8} + \frac{3}{64} + \frac{9}{512} + \cdots$

E. $\displaystyle\sum_{n=1}^{\infty} \frac{3^n}{2^{3n}}$