4.24 Comme $-1 < r < 1$, on a que $\lim\limits_{n \to +\infty} r^n = 0$.

$$\lim_{n \to +\infty} u_1 + u_2 + u_3 + \ldots + u_n = \lim_{n \to +\infty} u_1 \cdot \frac{1 - r^n}{1 - r} = u_1 \cdot \frac{1 - \overbrace{\lim\limits_{n \to +\infty} r^n}^{0}}{1 - r} = u_1 \cdot \frac{1}{1 - r}$$