$$\lim_{n \to +\infty} n^a \cdot \left[\log(n^2+7) - \log(n^2+3) \right] =$$

$$\lim_{n \to +\infty} n^a \cdot \left[\log(n^2) + \log\left(1+\frac{7}{n^2}\right) - \log(n^2) - \log\left(1+\frac{3}{n^2}\right) \right] =$$

$$\lim_{n \to +\infty} n^a \cdot \left[\frac{7}{n^2} - \frac{3}{n^2} + o\left(\frac{1}{n^2}\right) \right] =$$

$$\lim_{n \to +\infty} 4 \cdot n^{a-2} = \begin{cases} 0 \ se \ a<2 \\ 4 \ se \ a=2 \\ +\infty \ se \ a>2 \end{cases}$$