.

$$y_n = a \cdot y_{n-1}$$

$$\Leftrightarrow y_n = a^n \cdot y_0$$

$$\Leftrightarrow \frac{y_n}{y_0} = a^n$$

$$\Leftrightarrow \frac{\log \frac{y_n}{y_0}}{\log a}$$

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