

Kittel TP 2.4 (a)  $44 = 26 + 10 + 8$

$\uparrow \quad \uparrow \quad \uparrow$   
 letters   #s   symbols?

$$\Rightarrow P = \left(\frac{1}{44}\right)^{100000} = \boxed{10^{-164345}}$$

(b) Each monkey types approx.  $10^{19}$  sequences,

Thus there are approximately  $10^{10} \times 10^{19} = 10^{29}$  sequences.

$$10^{29} \times 10^{-164345} = \boxed{10^{-164316}}$$