Answer on Question \# 82916, Math / Combinatorics | Number Theory

Question 1. At least how many 8's are needed after 1 to make a number which can be expressed as $x^{64}$, where $x$ is an integer?

Proof. $x^{64}=a^{2}$. Last digit of $a^{2}$ belong to $\{0,1,4,5,6,9\}$. So we need zero $8^{\prime}$ 's after 1 and $x=1$.

