A certain type of perfection can only be realized through a limitless accumulation of the imperfect.

— Haruki Murakami

You are writing code to calculate exponential and trigonometric functions for a microcontroller. The functions will receive input between -1 and 1 and should return an output with error less than 10^{-3}. How many terms of the power series will you include?

```
def exp(x):  ...
def sin(x):  ...
def cos(x):  ...
```