Q. what is the right example?

$$e^{2\pi i \frac{jk}{N}} \times e^{2\pi i \frac{jl}{N}}$$

$$f(j, k, l) = \cos\left(2\pi \frac{jk}{N}\right) \times \sin\left(2\pi \frac{jl}{N}\right) e^{-j/N} \sim g(j,k) \times h(j,l)$$

$$+ \sin\left(2\pi \frac{jk}{N}\right) \times \cos\left(2\pi \frac{jl}{N}\right) e^{-j^2/N^2}$$

$$(0 \leq j, k, l < N)$$

$$(M) \simeq M [\hat{M}]^{-1} M$$

① Show that for a given j $\tilde{f}_j(k, l)$ can be well approximated by TCI.

② for a given l, $\tilde{g}_l(j, k)$ is NOT.

③ Can we perform MC-TCI combined integral?

0 or 1

$$(x)_2 = \frac{v_1}{2} + \frac{v_2}{4} + \frac{v_3}{8} + \cdots$$

$$f(x, y) \simeq \underline{\underline{g(x)}}\ \underline{\underline{h(y)}}$$

$$0 \leq x < 1$$

$$(v_1 v_2 v_3 \cdots)$$

QTCI.

$$\underline{\underline{f(x)}} = \underline{\tilde{f}(v_1, v_2, v_3, \cdots)}$$

$$\Downarrow$$

$$\underline{g_1(v_1) \times g_2(v_2) \times g_3(v_3) \cdots}$$