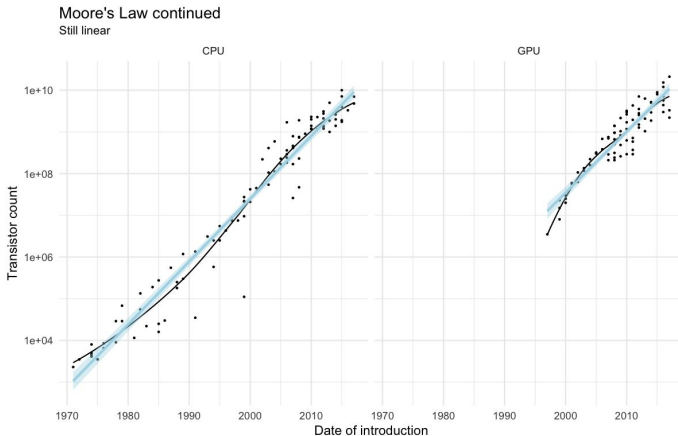


Modern computers are **very** good at matrix multiplication, so we usually end up trying to convert a computational problem into linear algebra



Multiplying two $N \times N$ matrices has time complexity $\sim N^3$