

Re: How to solve $(2x + 3y)^3$?

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dwwdkddb wrote:

You're joking, right? It is most easily done just by multiplying $(2x+3y)$ by $(2x+3y)$ and then multiplying the result by $(2x+3y)$.

I don't agree on that, because multiplying out involves a greater number of operations. My idea of "easy" is to avoid using brute force whenever it can be done faster by some more general method.

I think you're neglecting the number of operations involved in computing the binomial coefficients to make this argument. You have $3C0$, $3C1$, $3C2$ and $3C3$ to compute, (quite a few multiplications and divisions there) as well as the various powers of 2 and 3 to multiply together.

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