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数学作业纸

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$$\begin{aligned} 1. \quad f(t) &= \sin(t) \cos(2t) + 5 \cos(3t) \sin(4t) \\ &= \frac{1}{2} [\sin(3t) + \sin(-t)] + \frac{5}{2} [\sin(7t) - \sin(-t)] \\ &= -2 \sin(-t) + \frac{1}{2} \sin(3t) + \frac{5}{2} \sin(7t) \\ &= 2 \sin(t) + \frac{1}{2} \sin(3t) + \frac{5}{2} \sin(7t) \end{aligned}$$