

$$4) \int (2x+3)e^x dx \quad \left| \begin{array}{l} (2x+3)=f(x), f'(x)=2 \\ g'(x)=e^x, g(x)=e^x \end{array} \right| =$$

$$(2x+3)e^x - \int e^x \cdot 2 dx = (2x+3)e^x - 2 \int e^x dx =$$

$$= (2x+3)e^x - 2e^x + C = e^x (2x+3-2) + C =$$

$$= (2x+1)e^x + C$$