



⑦ Преобр. прав часть:

$$= \frac{A \overset{1}{(x-2)^2} \overset{1}{(x+3)} + B \overset{1}{(x-2)} \overset{1}{(x+3)} + C \overset{1}{(x-2)^2} \overset{1}{(x+3)}}{(x-2)^2(x+3)} =$$

$$= \frac{A(x^2 + x - 6) + Bx + 3B + Cx^2}{(x-2)^2(x+3)}$$

$$\underline{-4Cx + 4} = \underline{Ax^2 + Ax - 6A + Bx + 3B + Cx^2 - 4Cx + 4} =$$

$$= \underline{(A+C)x^2 + (A+B-4C)x - 6A + 3B + 4} = \underline{x^2 + 2x + 2}$$

$$\begin{cases} A+C=1 \\ A+B-4C=2 \\ -6A+3B+4=2 \end{cases}; \begin{cases} C=A-1 \\ A+B-4(A-1)=2 \\ -6A+3B=-2 \end{cases}; \begin{cases} C=A-1 \\ -3A+B=-2 \\ -6A+3B=-2 \end{cases}$$

$$\begin{cases} C=A-1 \\ B=3A-2 \\ -6A+3(3A-2)=-2 (*) \end{cases}$$

$$(*) \quad 3A - 6 = -2$$

$$3A = 4$$

$$A = \frac{4}{3}$$

$$B = 2$$

$$C = \frac{1}{3}$$