$$\begin{vmatrix} 1 & 2 & 3 \\ 8 & 9 & 4 \\ 7 & 6 & 5 \end{vmatrix} \xrightarrow{r_1 \to r_1 + r_3} \begin{vmatrix} 8 & 8 & 8 \\ 8 & 9 & 4 \\ 7 & 6 & 5 \end{vmatrix} \xrightarrow{\text{ستون‌ها را کم کردن}} \begin{vmatrix} 8 & 8 & 7 \\ 8 & 9 & 6 \\ 8 & 4 & 5 \end{vmatrix} \xrightarrow{r_3 \to r_3 - r_1} \begin{vmatrix} 8 & 8 & 7 \\ 0 & +1 & -1 \\ 0 & -4 & -2 \end{vmatrix}$$

$$= 8(-2 - (-1)\times(-4)) = -48$$

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$$\begin{vmatrix} 1+x & 2+x & 3+x \\ 8+x & 9+x & 4+x \\ 7+x & 6+x & 5+x \end{vmatrix} \xrightarrow{\substack{r_1 \to r_1 + r_3 \\ r_2 \to r_2 - r_3}} \begin{vmatrix} 8+2x & 8+2x & 8+2x \\ 1 & 3 & -1 \\ 7+x & 6+x & 5+x \end{vmatrix} \xrightarrow{r_3 \to r_3 - \frac{r_1}{2}} = 8+2x \begin{vmatrix} 1 & 1 & 1 \\ 1 & 3 & -1 \\ 3 & 2 & 1 \end{vmatrix}$$

$$= (8+2x)(3-(-2)-(1-(-3))+(2-6)) = -48-12x$$

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$$\begin{vmatrix} x^1 & x^2 & x^3 \\ x^8 & x^9 & x^4 \\ x^7 & x^6 & x^5 \end{vmatrix} = x x^4 x^5 \begin{vmatrix} 1 & x & x^2 \\ x^4 & x^5 & 1 \\ x^2 & x^1 & 1 \end{vmatrix} = x^{10}\left(x^5 - x - x(x^4 - x^2) + x^2(x^3 - x^7)\right)$$

$$= x^{10}(-x^9 + x^7 + x^3 - x) = -x^{19} + x^{17} + x^{13} - x^{11}$$