Java Task 13

- Calculate determinant for Following 3x3 matrix :

$$\begin{pmatrix} -1 & 2 & 5 \\ 7 & -4 & 3 \\ -5 & 0 & 10 \end{pmatrix}$$

(Correct answer is -230)

2x2 Matrix = $\begin{pmatrix} a & b \\ c & d \end{pmatrix}$ Determinant = $\begin{vmatrix} a & b \\ c & d \end{vmatrix}$

= ad - bc

3x3 Matrix M = $\begin{pmatrix} a & b & c \\ d & e & f \\ g & h & i \end{pmatrix}$ |M| = $\left(a * \begin{vmatrix} e & f \\ h & i \end{vmatrix} \right) - \left(b * \begin{vmatrix} d & f \\ g & i \end{vmatrix} \right) + \left(c * \begin{vmatrix} d & e \\ g & h \end{vmatrix} \right)$

= a(ei-fh) - b(di-gf) + c(dh-ge)