Samples **Determinant of the matrix**

1. Let $A = \begin{pmatrix} -9 & -5 & -7 \\ -3 & -8 & -4 \\ 5 & -4 & -3 \end{pmatrix}$.

Calculate $det(A)$ and state whether or not A is invertible.

2. Let $A = \begin{pmatrix} -2 & 3 & 6 \\ 8 & 0 & 3 \\ -1 & -2 & 9 \end{pmatrix}$.

Calculate $det(A)$ and state whether or not A is invertible.

3. Let $A = \begin{pmatrix} -4 & 5 & -4 \\ 7 & -1 & -7 \\ 5 & 0 & 3 \end{pmatrix}$.

Calculate $det(A)$ and state whether or not A is invertible.

4. Let $A = \begin{pmatrix} 8 & -5 & 4 \\ -6 & -8 & 5 \\ 4 & 2 & 9 \end{pmatrix}$.

Calculate $det(A)$ and state whether or not A is invertible.

5. Let $A = \begin{pmatrix} 8 & -6 & 1 \\ -6 & -3 & -3 \\ -7 & -1 & -1 \end{pmatrix}$.

Calculate $det(A)$ and state whether or not A is invertible.