

2. Assume that A and B are square matrices. Which of the following statements is correct (det=determinant):

- $\det (AxAT)$ is always integer
- $\det (AxB)$ is equal to $(\det (B) \times \det (AT))$.
- $\det (AxB)$ is equal to $(\det (B) \times \det (AT))$ if and only if AxB is commutative.
- $\det (AxB)$ is equal to $(\det (B) \times \det (AT))$ if and only if AxB is invertible.
- $\det (AxB)$ is equal to $(\det (B) \times \det (AT))$ if and only if AxB is commutative and invertible.

1. Assume that A and B are 3×3 matrices. Which of the following statements is correct (det=determinant):

- $\det(A+B)$ is equal to the $(\det(A) + \det(B))$.
- $\det(A+B)$ is equal to the $(\det(A) + \det(B))$ when $\det(B)$ is equal to zero.
- $\det(A+B)$ is equal to the $(\det(A) + \det(B))$ when one of the matrices is zero.
- $\det(A+B)$ is equal to the $(\det(A) + \det(B))$ when $\det(A)$ is equal to zero.
- $\det(A+B)$ is equal to the $(\det(A) + \det(B))$ when $\det(B)$ is equal to zero or $\det(A)$ is equal to zero