
Consider a linear vector space of all 2×2 matrices. Which of the following statement is correct?

- This vector space is 4-dimensional.
 - The Pauli matrices and the identity matrix are linearly independent.
 - The matrices in B are orthogonal to each other.
 - Any 2×2 matrix can be represented by a column matrix in an infinite number of ways.
 - A, B.
 - A, B, C.
 - A, B, C, D.
 - None of the above.
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