Quiz 1 - Regrade Submission 1

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3. $\mathbf{I^{-1} = I'}$

Original answer: False
Explanation: The transpose of an identity matrix is the same as its inverse.

4. $\mathbf{A^{-1}(A + B)B^{-1} = B^{-1} + A^{-1}}$

Original answer: False
Explanation:

$\mathbf{A^{-1}A = I}$
$\mathbf{A^{-1}AB^{-1} + A^{-1}BB^{-1} = IB^{-1} + IA^{-1} = B^{-1} + A^{-1}}$

10. $\mathbf{A^{-1}A = AA^{-1}}$

Original answer: False
Explanation:
Although order matters in matrix multiplication, an exception occurs when a matrix is multiplied by the inverse of itself, in which case the result is the same.