Homework: Matrix Operations

1. Compute each matrix sum or product if it is defined. If an expression is undefined, explain why:

, .

1. -2A, B-2A, AC, CD
2. A+2B, 3C-E, CB, EB
3. If a matrix A is 5 3 and the product AB is 5 7, what is the size of B?
4. Let and . What value(s) of k, if any, will make AB=BA?
5. Let . Construct a 22 matrix B such that AB is zero matrix. Use two different nonzero columns.
6. Let . Compute the following operations for the given matrices:
7. Show that