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**A pair of simultaneous linear matrix equations  $A_1XB_1 = C_1, A_2XB_2 = C_2$  and a matrix programming problem.** (English) [Zbl 0712.15010](#)

[Linear Algebra Appl.](#) 131, 107-123 (1990).

This paper extends the author's earlier result on solvability of a pair of simultaneous equations  $A_1 \times B_1 = C_1$  and  $A_2 \times B_2 = C_2$  on the complex field to a general field. Together with a set of necessary and sufficient conditions for the existence of a common solution, an expression for the general solution is provided.

Reviewer: [M.E.Sezer](#)

**MSC:**

[15A24](#) Matrix equations and identities

Cited in **1** Review  
Cited in **49** Documents

**Keywords:**

pair of simultaneous linear matrix equations; matrix programming problem; solvability; existence

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**References:**

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