

### Exercise 6.1.6

Exercise 6.1.6: Find conditions, broad enough to imply Exercise 6.1.4 as a special case, under which one has

$$EF \left( \sum_{i \neq j} a_{ij} f(X_i, X_j) \right) \leq EF \left( 4 \sum_{i \neq j} a_{ij} f(X_i, X'_j) \right)$$

for a potentially nonlinear function  $f$  in each variable when the other is held fixed, acting on a pair of random elements in any space. Show how Exercise 6.1.4 follows from your result.