25. A 0 or 1 is to be placed in each of the nine 1×1 squares in the 3×3 grid shown so that each row contains at least one 0 and at least one 1, and each column contains at least one 0 and at least one 1. The number of ways in which this can be done is

(A) 126   (B) 120   (C) 138

(D) 102   (E) 96