Magnetic vector potential of a square current loop. Consider a square loop with a steady current of intensity I, in free space. Let A_1 denote the magnitude of the magnetic vector potential at the loop center due to the current along one of the square sides. The magnitude of the total magnetic vector potential at the center equals

(A) $4A_1$.
(B) $2A_1$.
(C) Zero.
(D) None of the above.

Solution: (C) *Answer:* (C)