Boundary conditions at a magnetic-magnetic interface. Consider a boundary surface between two magnetic media, with relative permeabilities $\mu_{r1} = 600$ and $\mu_{r2} = 300$, respectively. Assuming that no conduction current exist on the boundary ($\mathbf{J}_s = 0$), which of the cases shown in Fig. Q5.2 represent possible magnetic field intensity vectors on the two sides of the boundary?

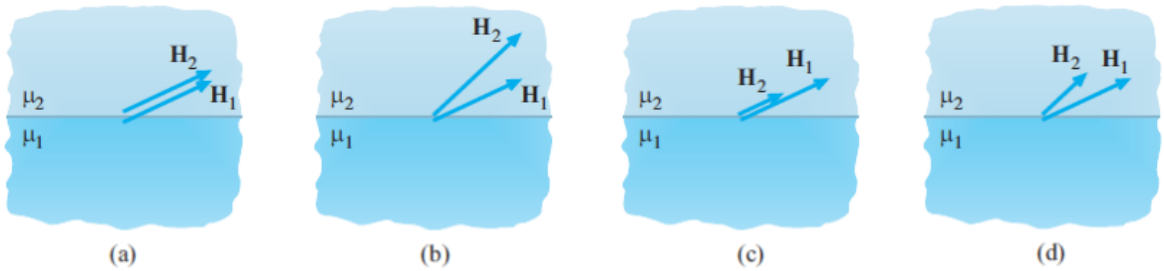

Figure Q5.2 Four offered combinations of magnetic field intensity vectors on two sides of a magnetic-magnetic interface ($\mu_1 = 2\mu_2$ and $\mathbf{J}_s = 0$); for Question 5.9.

(A) Case (a) only.
(B) Case (b) only.
(C) Case (c) only.
(D) Case (d) only.
(E) More than one case.
(F) None of the cases.

Solution: (B)
Answer: (B)