Change of field intensity due to a change of dielectric. An air-filled parallel-plate capacitor is charged and its terminals left open. A dielectric slab with relative permittivity $\varepsilon_r = 2$ is then inserted so as to just fill the space between the plates, without touching the plates by hands or any other conducting body. As a result, the electric field intensity between the plates

(A) increases.
(B) decreases.
(C) remains the same.

Solution: (B)
Answer: (B)