Change of field intensity/flux density and energy. Two capacitors contain the same amount of electric energy. If the electric field intensity (\mathbf{E}) at every point in the first capacitor becomes twice larger, while the electric flux density (\mathbf{D}) at every point in the second capacitor is halved, the energy stored in the first capacitor in the new electrostatic state is

- (A) 1/4 of
- (B) 1/16 of
- (C) 4 times
- (D) 16 times
- (E) the same as

that stored in the second capacitor.

Solution: (D) Answer: (D)

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