



68. The point charge  $Q$  shown above is at the center of a metal box that is isolated, ungrounded, and uncharged. Which of the following is true?
- (A) The net charge on the outside surface of the box is  $Q$ .
  - (B) The potential inside the box is zero.
  - (C) The electric field inside the box is constant.
  - (D) The electric field outside the box is zero everywhere.
  - (E) The electric field outside the box is the same as if only the point charge (and not the box) were there.

69. Which of the following capacitors, each of which has plates of area  $A$ , would store the most charge on the top plate for a given potential difference  $V$ ?

