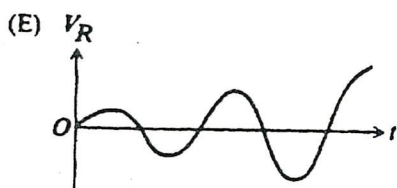
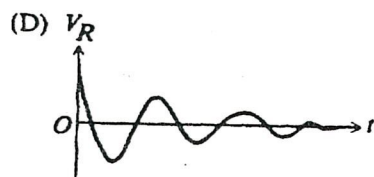
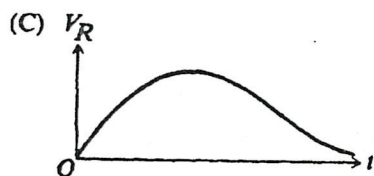
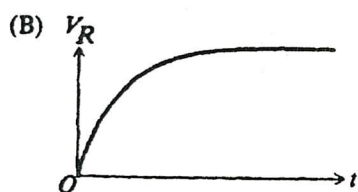
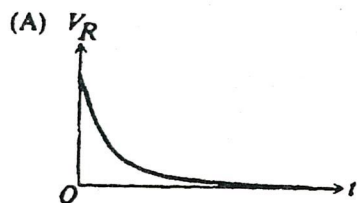
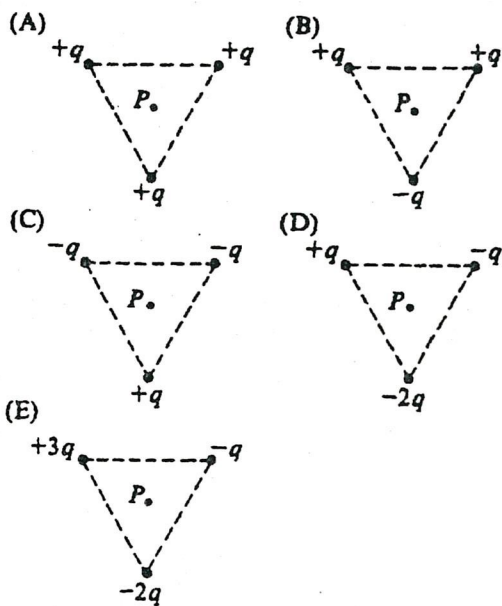


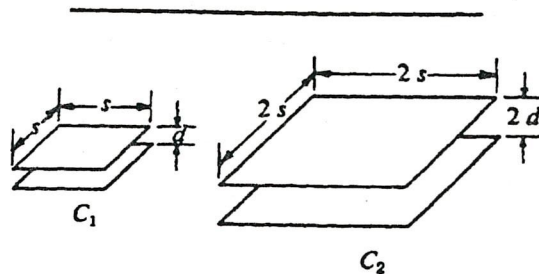
46. At time $t = 0$ the switch is closed in the circuit shown above. Which of the following graphs best describes the potential difference V_R across the resistance as a function of time t ?



Questions 47-48 relate to the following configurations of electric charges located at the vertices of an equilateral triangle. Point P is equidistant from the charges.



47. In which configuration is the electric field at P equal to zero?
48. In which configuration is the electric field at P pointed at the midpoint between two of the charges?



49. Two square parallel-plate capacitors of capacitances C_1 and C_2 have the dimensions shown in the diagrams above. The ratio of C_1 to C_2 is
- (A) 1 to 4
 (B) 1 to 2
 (C) 1 to 1
 (D) 2 to 1
 (E) 4 to 1