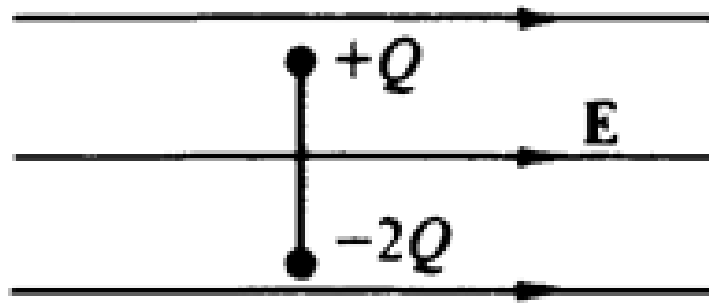


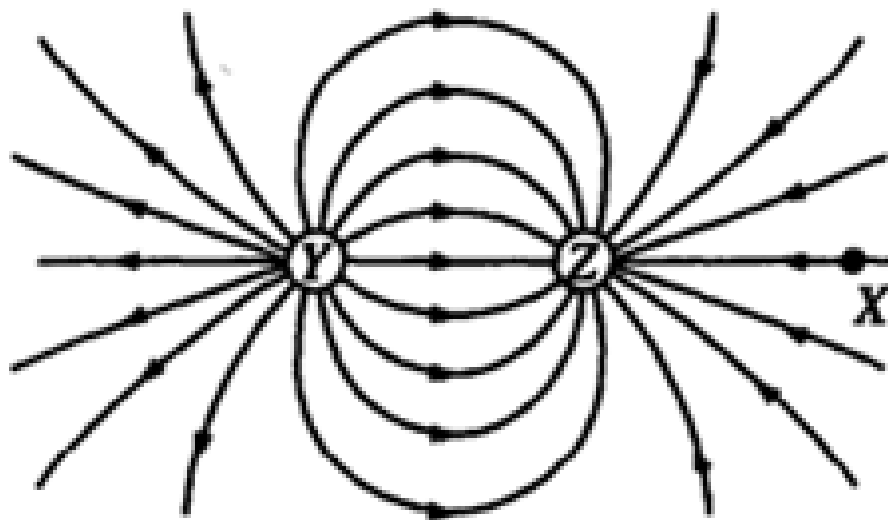
The electric field of two long coaxial cylinders is represented by lines of force as shown above. The charge on the inner cylinder is  $+2Q$ . The charge on the outer cylinder is

- (A)  $+3Q$
- (B)  $+Q$
- (C)  $-4Q$
- (D)  $-Q$
- (E)  $-3Q$



A rigid insulated rod, with two unequal charges attached to its ends, is placed in a uniform electric field  $E$  as shown above. The rod experiences a

- (A) net force to the left and a clockwise rotation
- (B) net force to the left and a counterclockwise rotation
- (C) net force to the right and a clockwise rotation
- (D) net force to the right and a counterclockwise rotation
- (E) rotation, but no net force



The diagram above shows electric field lines in an isolated region of space containing two small charged spheres, Y and Z.

(T or F?)

- ☐ The charge on Y is positive
- ☐ The charge on Z is positive.
- ☐ The strength of the electric field is the same everywhere.
- ☐ The electric field is strongest midway between Y and Z.
- ☐ A small negatively charged object placed at point X would tend to move toward the left
- ☐ Both charged spheres Y and Z carry charge of the same magnitude.

