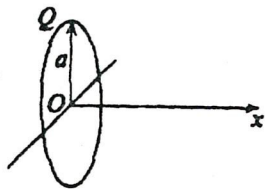


Questions 66-67



Positive charge Q is uniformly distributed over a thin ring of radius a that lies in a plane perpendicular to the x -axis, with its center at the origin O , as shown above.

66. The potential V at points on the x -axis is represented by which of the following functions?

(A) $V(x) = \frac{kQ}{a^2 + x^2}$

(B) $V(x) = \frac{kQ}{\sqrt{a^2 + x^2}}$

(C) $V(x) = \frac{kQ}{x^2}$

(D) $V(x) = \frac{kQ}{x}$

(E) $V(x) = \frac{kQ}{a + x}$

67. Which of the following graphs best represents the electric field along the positive x -axis?

