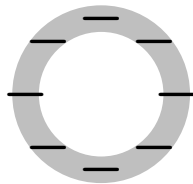


## Question 1

A positively charged plate is placed in the vicinity of a negatively charged ring. The plate and ring are held fixed as illustrated and the charges are evenly distributed on each.



P ×



Consider the statement regarding the electric field **produced by the ring and the plate**:

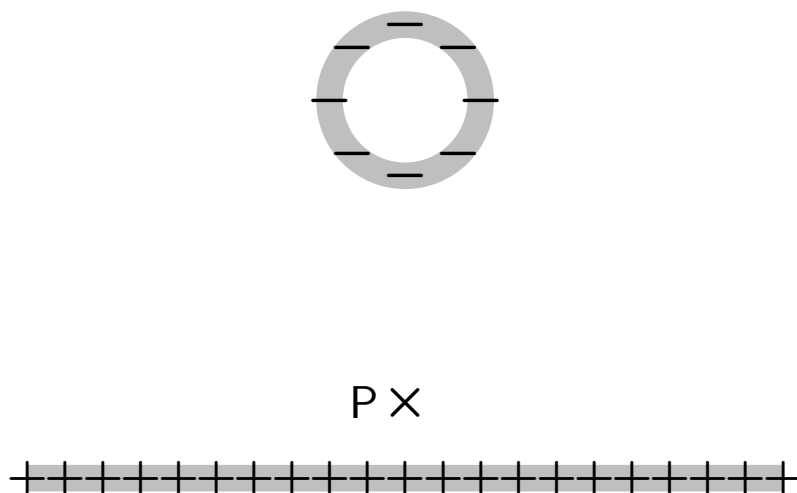
*“The electric field at point P describes, or is used to describe, whether the plate attracts or repels the ring.”*

Is this statement true or false?

1. True
2. False
3. Depends on the situation.

## Question 2

A positively charged plate is placed in the vicinity of a negatively charged ring. The plate and ring are held fixed as illustrated and the charges are evenly distributed on each.



Which of the following best represents the direction of the electric field **produced by the ring and the plate** at P?

1.  $\uparrow$  for positive probe charge  $\downarrow$  for negative probe charge.
2.  $\downarrow$  for positive probe charge  $\uparrow$  for negative probe charge.
3.  $\uparrow$  for any probe charge.
4.  $\downarrow$  for any probe charge.
5. Zero field.