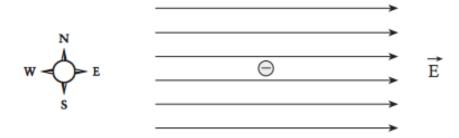
# Example1:

An electron in the electric field has an electric force acting on it in what direction?

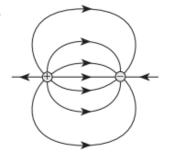


- A. North
- B. South
- C. East
- D. West

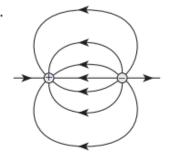
## **Example2:**

Which of the following diagrams shows the electric field between two equal but opposite charges?

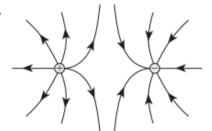
A.



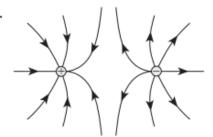
В.



C.



D.



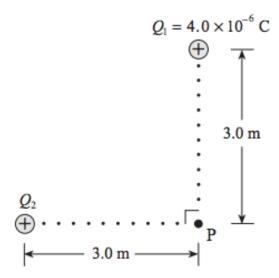
### Example 3:

The diagram below shows a positive charge located near a smaller (in magnitude) negative charge. In which region is there a point where the electric field due to the two charges is equal to zero?



#### Example 4:

The magnitude of the net electric field at P in the diagram below is  $5.0 \times 10^3$  N/C.



Find the magnitude of charge  $Q_2$ .

A. 
$$1.0 \times 10^{-6}$$
 C

B. 
$$3.0 \times 10^{-6}$$
 C

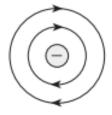
C. 
$$6.4 \times 10^{-6}$$
 C

D. 
$$1.0 \times 10^{-5}$$
 C

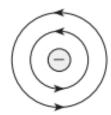
## Example 5:

Which diagram shows the electric field near a negative point charge?

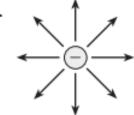
A.



B.



C.

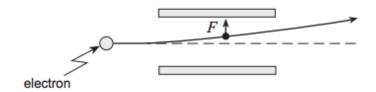


D.



## Example 6:

An electron passing between parallel plates 0.025 m apart experiences an upward electrostatic force of  $5.1 \times 10^{-16} \text{ N}$ .



a) What is the magnitude of the electric field between the plates?

(3 marks)

b) What is the potential difference between the plates?

(2 marks)

c) On the diagram below draw in the connections to the power supply necessary for the electron to experience this upward force. (2 marks)

