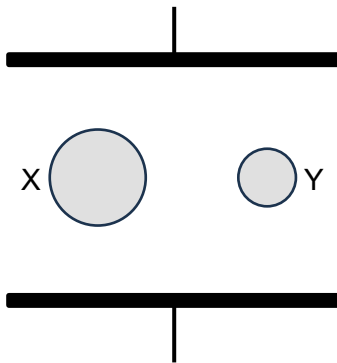


- 20** The diagram shows two unequally charged spheres X and Y of masses  $2m$  and  $m$  respectively. They are kept stationary by the application of a potential difference between two parallel plates.



If the plates are moved closer together, what is the subsequent motion of the two charges?

- A** Both X and Y will move upward with the same acceleration.
- B** Both X and Y will move upward but X will have a larger acceleration than Y.
- C** Both X and Y will move downward with the same acceleration.
- D** Both X and Y will move downward but X will have a larger acceleration than Y.