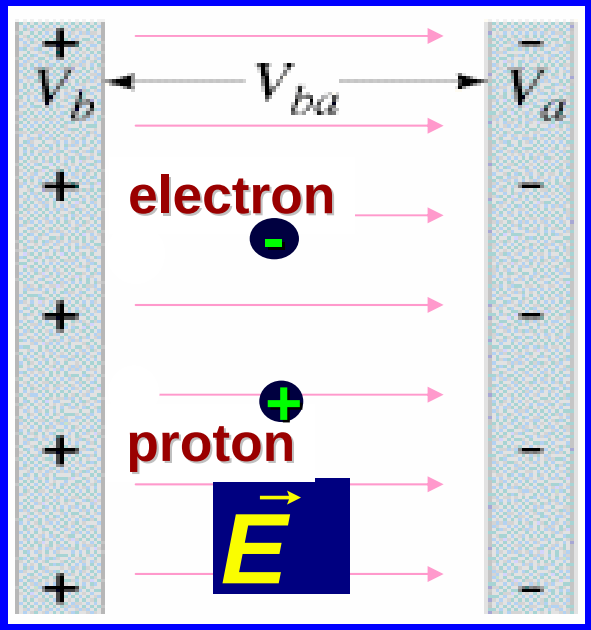
ConcepTest 23.1c Electric Potential Energy III

A proton and an electron are in a constant electric field created by oppositely charged plates. You release the proton from the positive side and the electron from the negative side. When it strikes the opposite plate, which one has more KE?

1) proton
2) electron
3) both acquire the same KE
4) neither – there is no change of KE
5) they both acquire the same KE but with opposite signs



ConcepTest 23.4 Hollywood Square

Four point charges are arranged at the corners of a square. Find the electric field *E* and the potential *V* at the center of the square.

1) $E = 0$ $V = 0$
2) $E = 0$ $V \neq 0$
3) $E \neq 0$ $V \neq 0$
4) $E \neq 0$ $V = 0$
5) $E = V$ regardless of the value