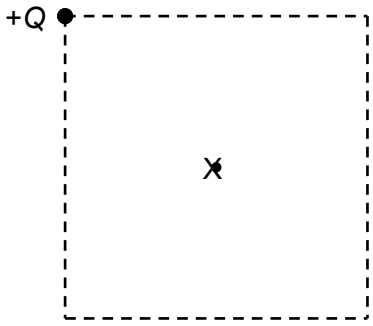
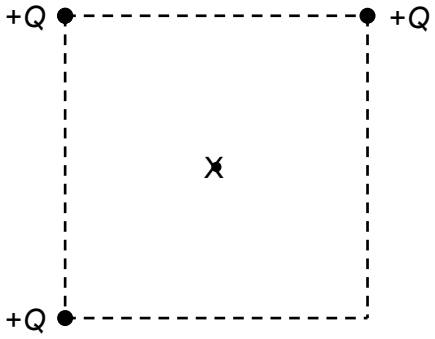
21

A point charge +*Q* is placed at the top-left hand corner of a square as shown.



At the centre X of the square, the electric field strength is *E* and the electric potential is *V*.

Two additional point charges of the same magnitude +*Q* are placed at the top-right and bottom-left corners of the square as shown.



What are the electric field strength and the electric potential at the centre X of the square?

electric field strength

electric potential

A

E

1.5V

B

E

3V

C

$2E$

3V

D

3E

3V