

- 19** Two identical spherical drops of water, each carrying a charge of  $+3.0 \times 10^{-11}$  C and with an electric potential of 500 V on its surface, combine to form a single spherical drop.

What is the approximate potential on the surface of the new drop formed?

**A** 1000 V

**B** 790 V

**C** 540 V

**D** 500 V