

71. The charges are equidistant from the point where we are evaluating the potential – which is computed using Eq. 25-27 (or its integral equivalent). Eq. 25-27 implicitly assumes  $V \rightarrow 0$  as  $r \rightarrow \infty$ . Thus, we have

$$V = \frac{1}{4\pi\epsilon_0} \frac{+Q}{R} + \frac{1}{4\pi\epsilon_0} \frac{-2Q}{R} + \frac{1}{4\pi\epsilon_0} \frac{+3Q}{R}$$

which simplifies to  $Q/2\pi\epsilon_0 R$ .