69. Since the charge distribution on the arc is equidistant from the point where V is evaluated, its contribution is identical to that of a point charge at that distance. We assume $V \to 0$ as $r \to \infty$ and apply Eq. 25-27:

$$V = \frac{1}{4\pi\varepsilon_0}\frac{+Q}{R} + \frac{1}{4\pi\varepsilon_0}\frac{+4Q}{2R} + \frac{1}{4\pi\varepsilon_0}\frac{-2Q}{R}$$

which simplifies to $Q/4\pi\varepsilon_0 R$.