29.27. **Model:** The net potential is the sum of the potentials due to each charge.
Visualize: Please refer to Figure Ex29.27.
Solve: The potential at the dot is

$$V = \frac{1}{4\pi\varepsilon_0}\frac{q_1}{r_1} + \frac{1}{4\pi\varepsilon_0}\frac{q_2}{r_2} + \frac{1}{4\pi\varepsilon_0}\frac{q_3}{r_3}$$

$$= \left(9.0\times10^9 \text{ N m}^2/\text{C}^2\right)\left[\frac{2.0\times10^{-9}\text{ C}}{0.040\text{ m}} + \frac{2.0\times10^{-9}\text{ C}}{0.050\text{ m}} + \frac{2.0\times10^{-9}\text{ C}}{0.030\text{ m}}\right] = +1410\text{ V}$$

Assess: Potential is a scalar quantity, so we found the net potential by adding three scalar quantities.