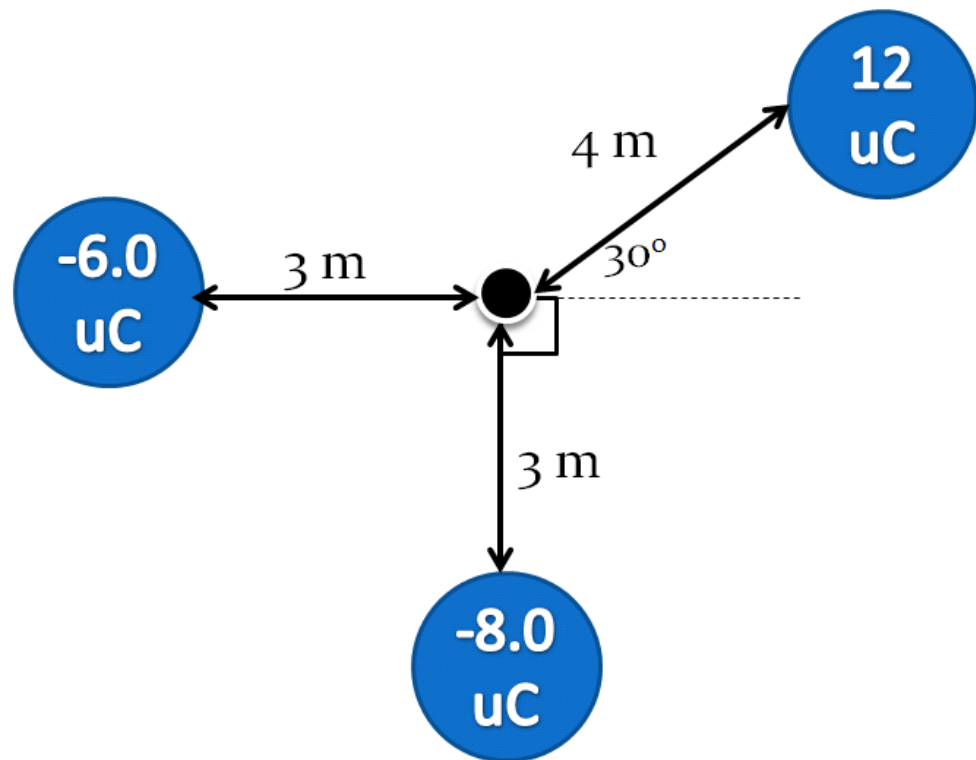
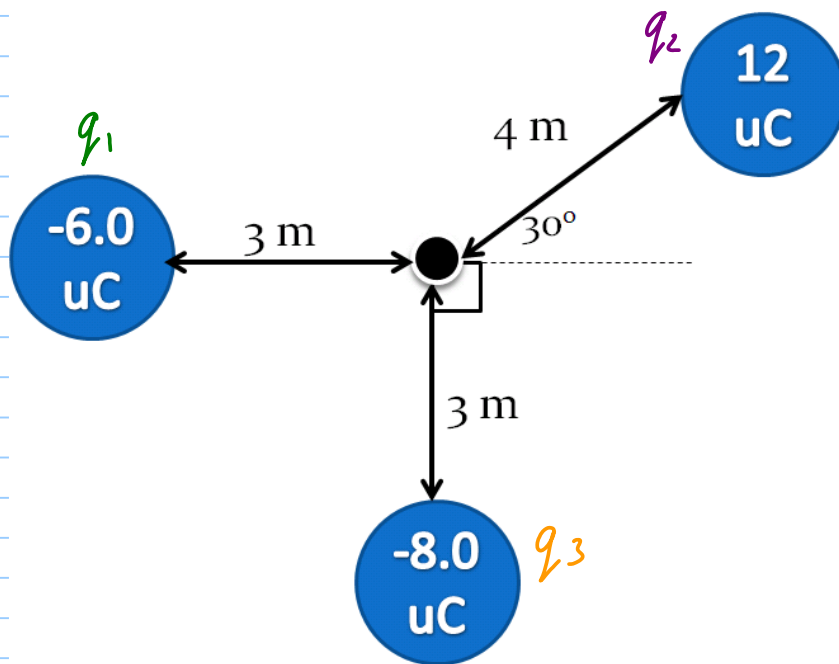


What is the electric potential at the point P shown below?





$$V_1 = \frac{kq_1}{r_1} = \frac{(9 \times 10^9)(-6 \times 10^{-6})}{3} = -18000 \text{ V} \checkmark$$

$$V_2 = \frac{kq_2}{r_2} = \frac{(9 \times 10^9)(12 \times 10^{-6})}{4} = 27000 \text{ V} \checkmark$$

$$V_3 = \frac{kq_3}{r_3} = \frac{(9 \times 10^9)(-8 \times 10^{-6})}{3} = -24000 \text{ V} \checkmark$$

$$V_T = V_1 + V_2 + V_3 = -18000 + 27000 - 24000$$

$$= -15000 \text{ V} \checkmark$$