$$A_{12} = \int\limits_{1}^{2} F_{\text{эл}} \cos\left(\vec{F} \,^\wedge\, d\vec{s}\right) ds = -\int\limits_{R_1}^{R_2} \frac{kQq}{r^2} dr =$$

$$= -kQq \int\limits_{R_1}^{R_2} r^{-2} dr = kQq \frac{1}{r}\bigg|_{R_1}^{R_2} = kQq\left(\frac{1}{R_2} - \frac{1}{R_1}\right). \qquad (2.10)$$