3.2. 1. $W_1 = \frac{q_1}{4\pi\varepsilon_0}\left(\frac{q_2}{|x_1-x_2|} + \frac{q_3}{|x_1-x_3|}\right) = q_1(\varphi_{12} + \varphi_{13})$

2. $W_2 = \frac{q_2}{4\pi\varepsilon_0}\left(\frac{q_1}{|x_2-x_1|} + \frac{q_3}{|x_2-x_3|}\right) = q_2(\varphi_{21} + \varphi_{23})$

3. $W_3 = \frac{q_3}{4\pi\varepsilon_0}\left(\frac{q_1}{|x_3-x_1|} + \frac{q_2}{|x_3-x_2|}\right) = q_3(\varphi_{31} + \varphi_{32})$