Consider the dipole shown below. Two point charges lie on the $x$-axis, each a distance of 0.01 m from origin.

Determine the electric potential difference $V_{ab}$ between the point denoted by $\vec{r}_a = 4 \hat{a}_x + 3 \hat{a}_z$ and the point denoted by $\vec{r}_b = -3 \hat{a}_x + 4 \hat{a}_y$. 

\[ -12,500 \pi \varepsilon_0 \text{ C} \]

\[ 12,500 \pi \varepsilon_0 \text{ C} \]