7 Point charges of 2 μC and 3 μC are placed 1.2 m apart as shown.

What is the electric field strength at the point labelled X?

☒ **A** $\dfrac{2\times10^{-6}}{4\pi\varepsilon_0(0.4)^2}+\dfrac{3\times10^{-6}}{4\pi\varepsilon_0(0.8)^2}$

☒ **B** $\dfrac{2\times10^{-6}}{4\pi\varepsilon_0(0.4)^2}-\dfrac{3\times10^{-6}}{4\pi\varepsilon_0(0.8)^2}$

☒ **C** $\dfrac{2\times10^{-6}}{4\pi\varepsilon_0(0.8)^2}+\dfrac{3\times10^{-6}}{4\pi\varepsilon_0(0.4)^2}$

☒ **D** $\dfrac{2\times10^{-6}}{4\pi\varepsilon_0(0.8)^2}-\dfrac{3\times10^{-6}}{4\pi\varepsilon_0(0.4)^2}$

(Total for Question 7 = 1 mark)