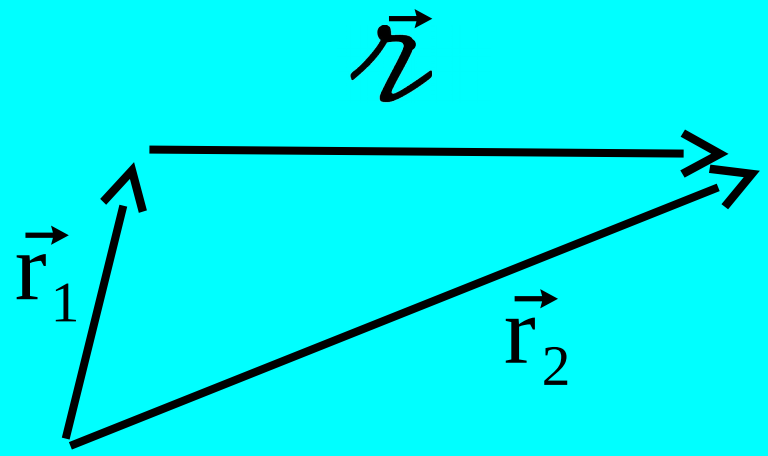
How is vector $\vec{r}$ related to $\vec{r}_1$ and $\vec{r}_2$?



(A) $\vec{r} = \vec{r}_1 + \vec{r}_2$

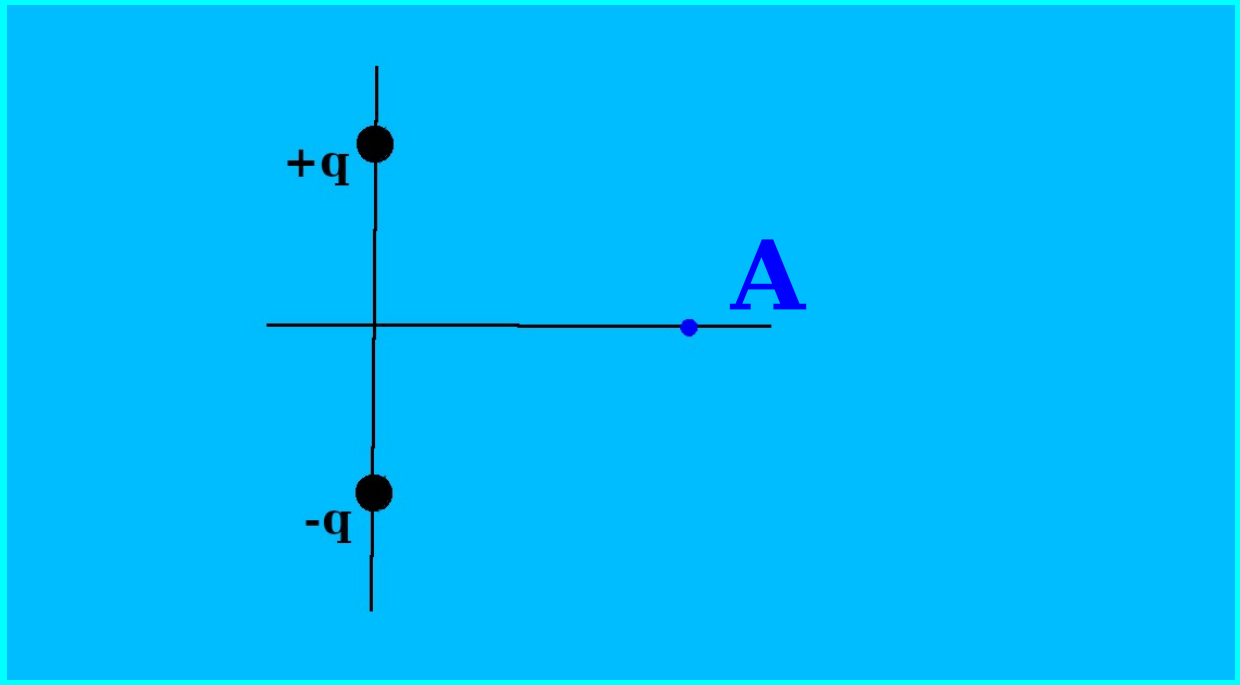
(B) $\vec{r} = \vec{r}_1 - \vec{r}_2$

(C) $\vec{r} = \vec{r}_2 - \vec{r}_1$

(D) None of these

Charges +q and -q are arranged symmetrically above and below the x-axis.

What direction is the E-field at the point A?



A) Left

B) Right

C) Up

D) Down

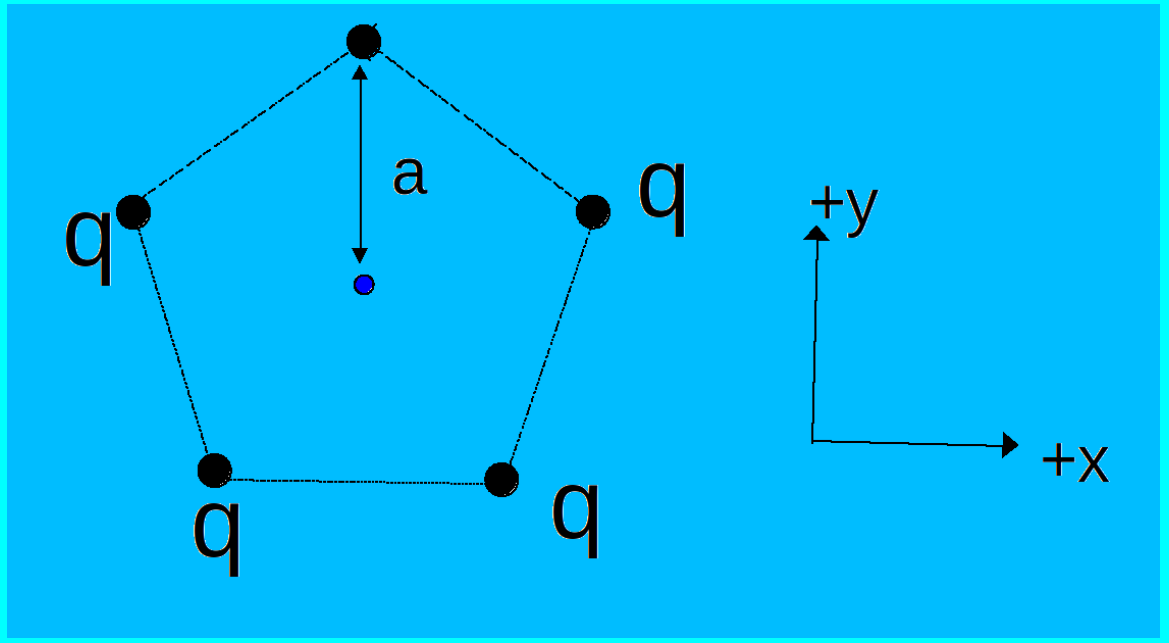
E) Zero, some other direction, or ambiguous.

5 charges, q, are arranged in a regular pentagon.

What is the E-field at the center?

A) Zero.

B) Not Zero.



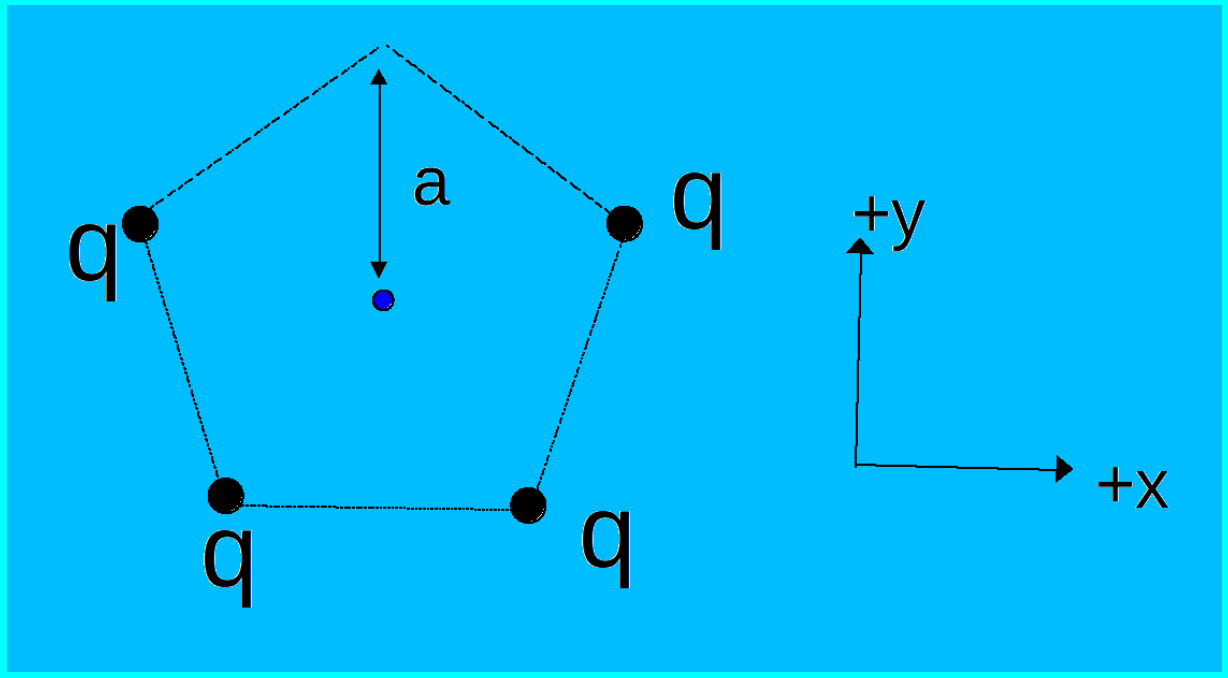
C) Really need trig and a calculator to decide.

One of the 5 charges has been removed.

What is the E-field at the center?

A) $\vec{E} = -k\frac{q}{a^2}\hat{y}$

B) $\vec{E} = k\frac{q}{a^2}\hat{y}$



C) Zero

D) Something completely different.

E) Nasty – need more time!