The figure shows three positive point charges. If we made the change stated in red, how would it affect the electric force vector felt by charge B?

A. It will only change the direction.

B. It will only increase the magnitude.

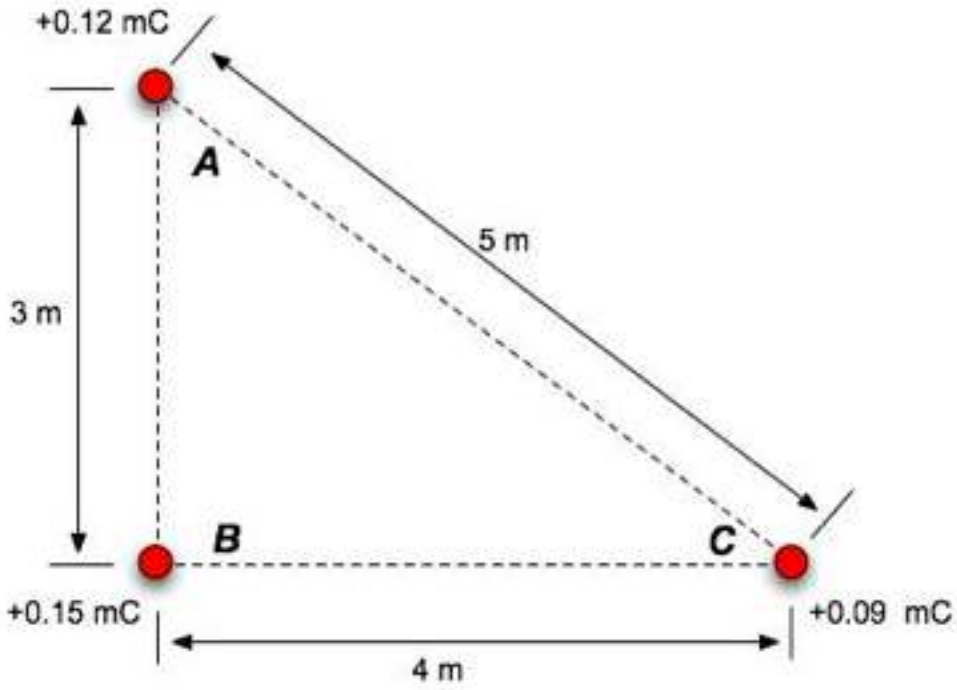
C. It will only decrease the magnitude.

D. It will increase the magnitude and change its direction.

E. It will decrease the and change its direction.

F. It will not affect the vector.

Double the charge on B.



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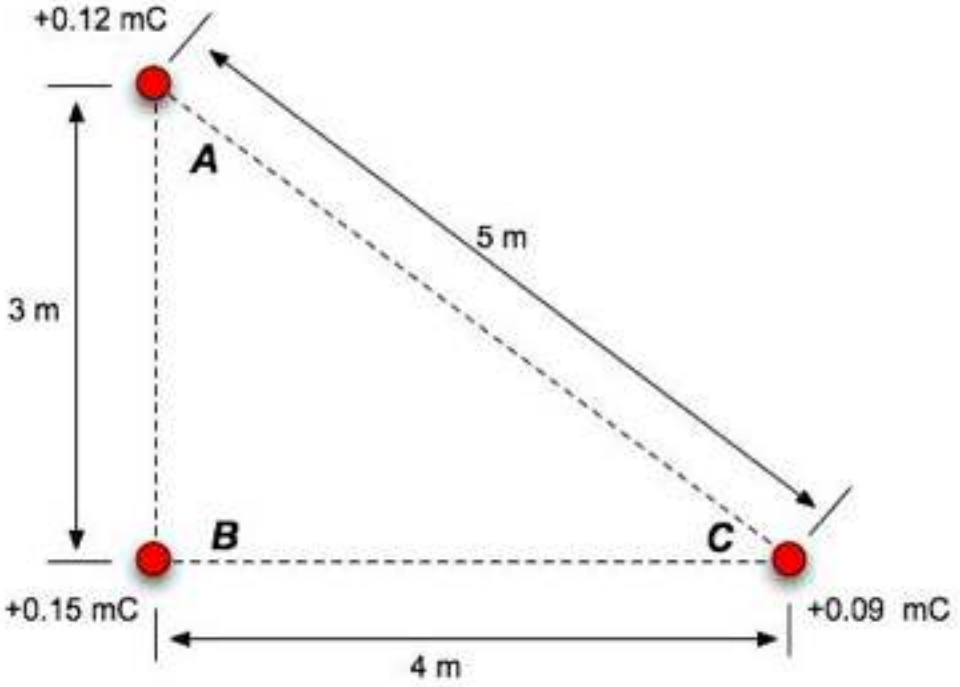
C. It will only decrease the magnitude.
D. It will increase the magnitude and change its direction.
E. It will decrease the and change its direction.
F. It will not affect the vector.

Change the sign of the charge on B.



The figure shows three positive point charges. If we made the change stated in red, how would it affect the electric force vector felt by charge B?

A. It will only change the direction.

Double the charges on A & C.

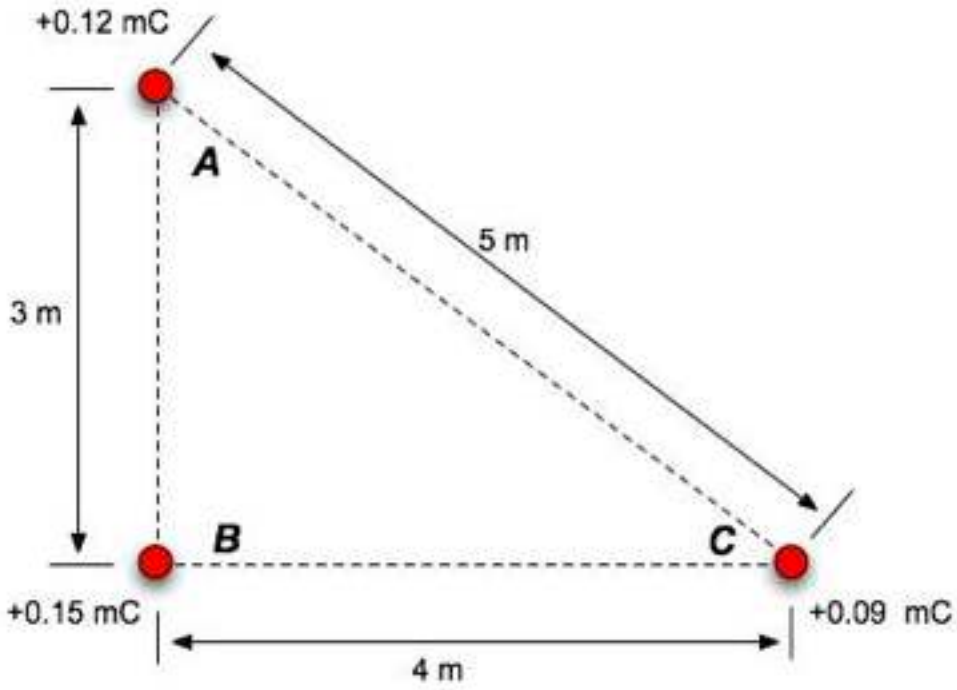
B. It will only increase the magnitude.

C. It will only decrease the magnitude.

D. It will increase the magnitude and change its direction.

E. It will decrease the and change its direction.

F. It will not affect the vector.



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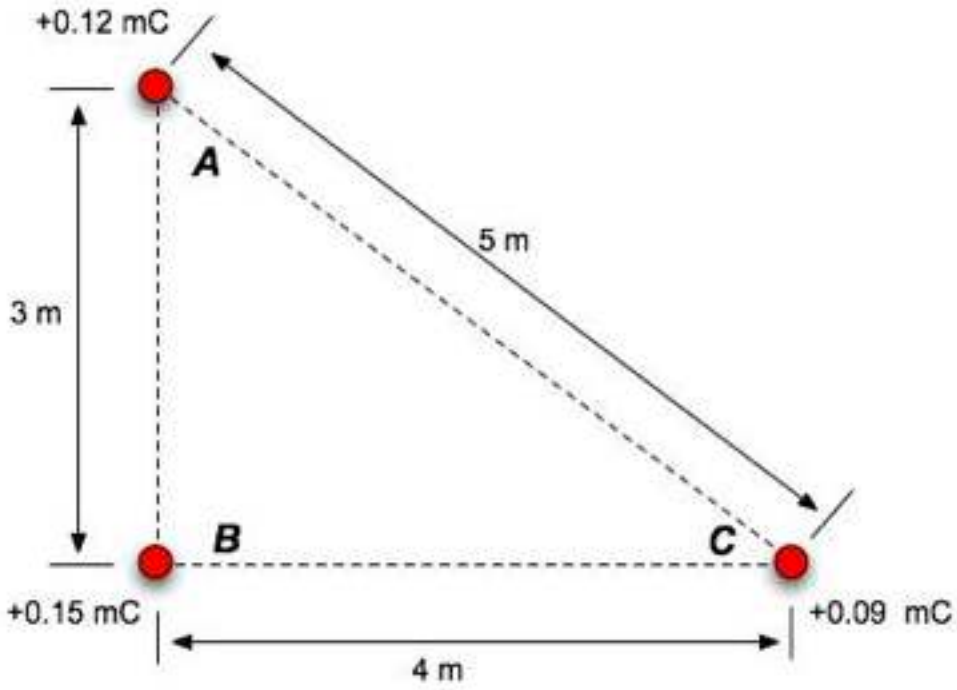
E. It will decrease the and change its direction.

F. It will not affect the vector.

Double the charge on A.



Below are shown four situations in which charges have been placed. Each positive and negative charges has the same magnitude. If in each situation, we put a small positive test charge at the indicated positions, rank the magnitude of the force that the test charge would feel.