\( \vec{B} \) field is coming out of the paper. \( q_1 \) is a positive charge and \( q_2 \) is a negative charge.

Determine the direction of the magnetic force for each case.

Case I: Force on positive charge \( q_1 \), \( q_1 > 0 \).
Case II: Force on negative charge \( q_2 \), \( q_2 < 0 \).

A) Case I: \( \uparrow \) and Case II: \( \rightarrow \).
B) Case I: \( \downarrow \) and Case II: \( \rightarrow \).
C) Case I: \( \uparrow \) and Case II: \( \leftarrow \).
D) Case I: \( \downarrow \) and Case II: \( \leftarrow \).

Use the right-hand rule, remembering to invert the direction for negative charges.

Answer A.

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