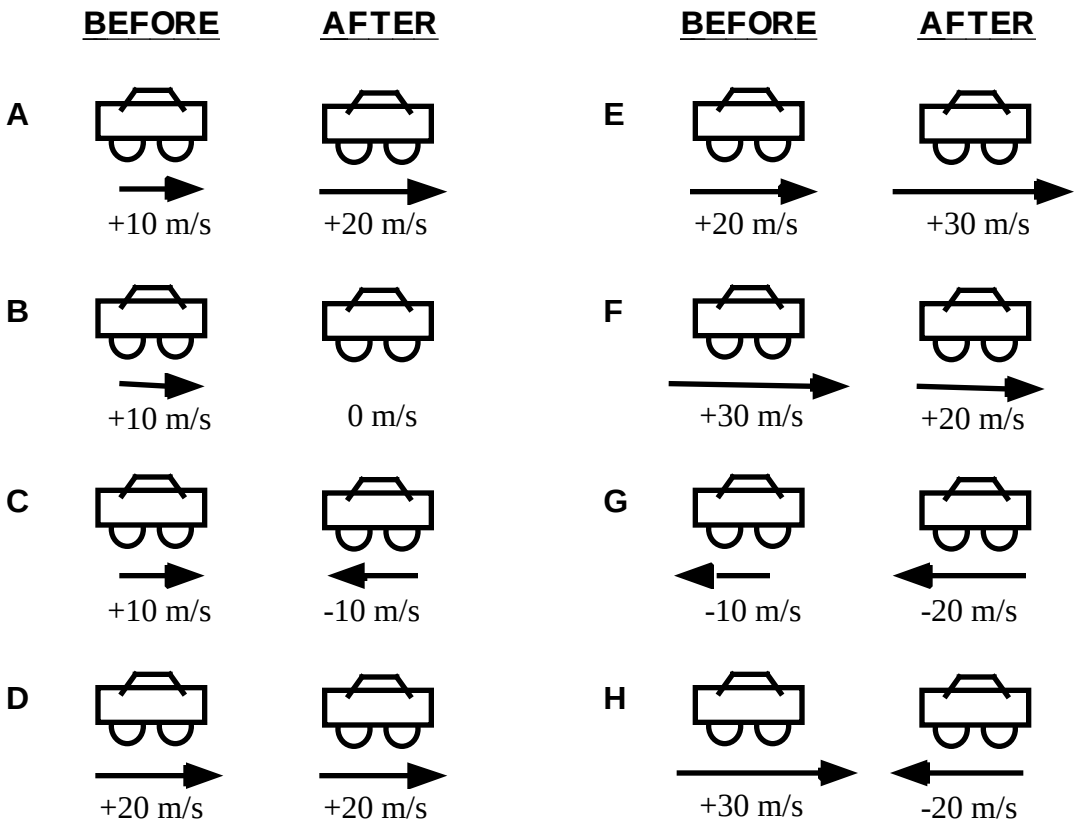
Cars—Change in Momentum During a Change of Velocity [83]

The eight situations below show *before* and *after* "snapshots" of a car's velocity. Rank these situations, in terms of the change in momentum of these cars, from most positive to most negative. All cars have the same mass. Negative numbers, if any, rank lower than positive ones (-20 m/s < -10 m/s < 0 < 5).



Most Most
Positive 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ 7_____ 8_____ Negative

Or, the change in momentum of these cars is the same (but not zero) for all of these._____

Or, the change in momentum of these cars is zero for all of these._____

Or, it is not possible to determine the change in momentum for all of these cases._____

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically Guessed				Sure					Very Sure
1	2	3	4	5	6	7	8	9	10

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