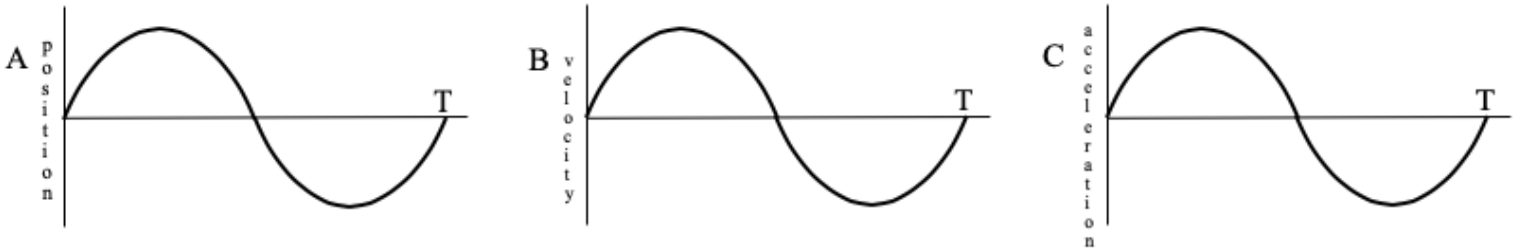
From Frensley #1: Object's A, B and C all start at the same position and move along parallel lines. The graphs below represent the motion of the objects during the interval $0 < t < T$. Note the labels on the vertical axis of each graph (the first is position, the second velocity and the third acceleration, if the print is too small to read), and assume that C starts from rest.



a.) Rank the displacement of the three objects for the interval $0 < t < T$ from least to greatest. Explain your reasoning.

b.) Rank the number of times the three objects change direction between but not including the endpoint times of the $0 < t < T$ interval (do this from least to most). Explain your reasoning.