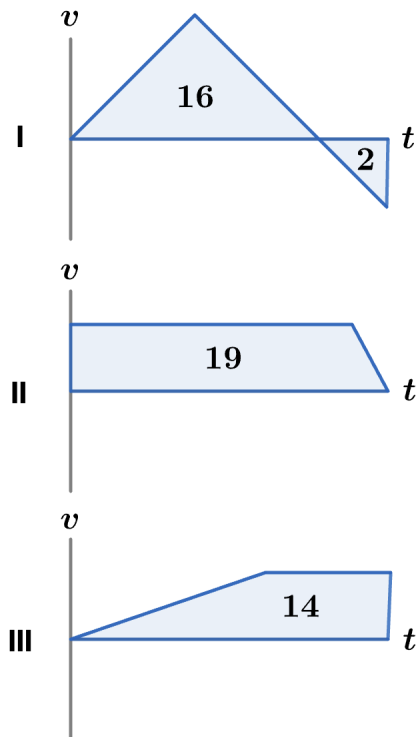


# 2011 F=ma Exam: Problem 4

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Recall distance corresponds to the unsigned area under the graph for a  $v$ - $t$  plot.



In our case, we find from the plots:  $d_1 = 18, d_2 = 19, d_3 = 14$  so

$$d_2 > d_1 > d_3$$

Since these quantities are all positive, taking the magnitudes leaves the ranking the same. Thus, the answer is B.