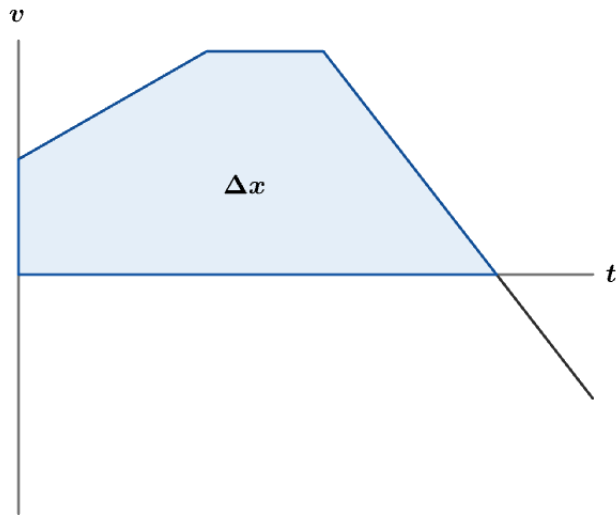# 2008 F=ma Exam: Problem 4

Kevin S. Huang

On a velocity-time graph, the displacement is given by the area under the curve.

Thus, the maximum displacement occurs when the velocity goes to zero (at $t = 2.5\,\text{s}$). From the graph, we have $\Delta x = 7\,\text{m}$ so the answer is $\boxed{\text{D}}$.