

2007 F=ma Exam: Problem 3

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We have

$$x(t) = 8t - 3t^2$$

The average velocity is defined as

$$\bar{v} = \frac{\Delta x}{\Delta t} = \frac{x(2) - x(1)}{2 - 1} = \frac{8(2) - 3(2)^2 - 8(1) + 3(1)^2}{2 - 1} = -1 \text{ m/s}$$

so the answer is B.