



AP[®] Physics C Mechanics 2001 Scoring Commentary

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**AP[®] PHYSICS C MECHANICS
2001 SCORING COMMENTARY**

Question 1

Sample 1 (Score 15)

The student earned all 15 points. Method 1 was used to solve parts (b) and (c). Although the student did not specifically identify the answer to part (b) as momentum, the use of correct units and the correct substitution of the impulse for the change in momentum in part (c) was sufficient to earn full credit.

Sample 2 (Score 15)

The student earned all 15 points. Method 1 was used to solve parts (b) and (c).

Question 2

Sample 1 (Score 15)

The student earned all 15 points. Method 1 was used for part (a) i and a variation of Method 2 for part (a) ii.

Sample 2 (Score 15)

The student earned all 15 points. Method 1 was used for part (a) i and Method 1 for part (a) ii.

Question 3

Sample 1 (Score 15)

The student earned all 15 points. In part (b), the student neatly worked all the calculations involving torque on the right before substituting into the force equation.

Sample 2 (Score 12)

Parts (a), (b), and (c) are correct, but part (d) did not earn any credit. The use of ℓ instead of L for the length of the rod was not a problem, since there was no chance of confusion over what length was intended.