## $A P$

## AP ${ }^{\oplus}$ Microeconomics 2012 Scoring Guidelines

## The College Board

The College Board is a mission-driven not-for-profit organization that connects students to college success and opportunity. Founded in 1900, the College Board was created to expand access to higher education. Today, the membership association is made up of more than 5,900 of the world's leading educational institutions and is dedicated to promoting excellence and equity in education. Each year, the College Board helps more than seven million students prepare for a successful transition to college through programs and services in college readiness and college success - including the SAT ${ }^{\circ}$ and the Advanced Placement Program. The organization also serves the education community through research and advocacy on behalf of students, educators, and schools. The College Board is committed to the principles of excellence and equity, and that commitment is embodied in all of its programs, services, activities, and concerns.
© 2012 The College Board. College Board, Advanced Placement Program, AP, SAT and the acorn logo are registered trademarks of the College Board. All other products and services may be trademarks of their respective owners. Permission to use copyrighted College Board materials may be requested online at: www.collegeboard.com/inquiry/cbpermit.html.

Visit the College Board on the Web: www.collegeboard.org.
AP Central is the official online home for the AP Program: apcentral.collegeboard.org.

# AP ${ }^{\oplus}$ MICROECONOMICS 2012 SCORING GUIDELINES 

## Question 1

10 points $(5+1+2+2)$
(a) 5 points:

(i) 3 points:

- One point is earned for a correctly labeled downward-sloping demand curve and a downward-sloping marginal revenue curve below the demand curve.
- One point is earned for identifying the profit-maximizing quantity, $\mathrm{Q}_{\mathrm{m}}$, at $\mathrm{MR}=\mathrm{MC}$.
- One point is earned for identifying price, $\mathrm{P}_{\mathrm{m}}$, above $\mathrm{Q}_{\mathrm{m}}$ on the demand curve.
(ii) 1 point:
- One point is earned for shading the area of economic loss.
(iii) 1 point:
- One point is earned for identifying the allocatively efficient quantity, $\mathrm{Q}_{\mathrm{e}}$, at $\mathrm{MC}=\mathrm{D}$.
(b) 1 point:
- One point is earned for stating that the total revenue would decrease because the demand is price elastic in that range of the demand curve where $\mathrm{MR}>0$.
(c) 2 points:
- One point is earned for stating that the quantity will increase because the subsidy will cause the MC curve to shift downward and intersect the MR curve at a larger quantity.
- One point is earned for stating that the consumer surplus will increase.
(d) 2 points:
- One point is earned for stating that the deadweight loss will not change because the lumpsum subsidy does not change the profit-maximizing quantity.
- One point is earned for stating that economic losses will decrease.


# AP ${ }^{\circledR}$ MICROECONOMICS 2012 SCORING GUIDELINES 

## Question 2

6 points $(3+1+1+1)$
(a) 3 points:

- One point is earned for determining the total utility, which is 24 .
- One point is earned for stating that three bagels and five toy cars will be purchased.
- One point is earned for explaining that with this combination of bagels and toys, the marginal utility per dollar spent on bagels equals the marginal utility per dollar spent on toy cars.
(b) 1 point:
- One point is earned for stating that Theresa's demand for bagels will not change because the increase in the price of wheat will affect the supply of bagels, not the demand.
(c) 1 point:
- One point is earned for stating that bagels are inferior goods.
(d) 1 point:
- One point is earned for calculating the cross-price elasticity for toy cars and blocks: $-0.04 / 0.10=-0.4$


# AP ${ }^{\circledR}$ MICROECONOMICS 2012 SCORING GUIDELINES 

## Question 3

5 points $(1+3+1)$
(a) 1 point:

- One point is earned for stating that Loriland is importing 12 million pounds.
(b) 3 points:
- One point is earned for identifying the new level of domestic production as 6 million pounds.
- One point is earned for calculating the domestic consumer surplus as $\$ 25$ million and showing the work: $1 / 2[(\$ 9-\$ 4) \times 10]=\$ 25$
- One point is earned for calculating the revenue from the tariff as $\$ 8$ million and showing the work: $(\$ 4-\$ 2)(10-6)=\$ 8$.
(c) 1 point:
- One point is earned for identifying the per-unit tariff that maximizes the sum of consumer and producer surplus as \$0.

