

AP Microeconomics

Sample Student Responses and Scoring Commentary Set 1

Inside:

Free-Response Question 3

- ☑ Scoring Guidelines
- **☑** Student Samples
- **☑** Scoring Commentary

Question 3: Short		5 points
A Point 1	State "No," producing Unique jewelry is not the best choice for Tony's Trinkets if Bitaly's Bracelets chooses to produce Silver jewelry and explain that Tony's Trinkets'	1 point
Tome 1	profit from producing Typical jewelry is \$21, which is greater than its profit when producing Unique jewelry, which is \$20.	
В	State that Bitaly's Bracelets does not have a dominant strategy and explain that when	1 point
Point 2	Tony's Trinkets chooses Unique, Bitaly's Bracelets' profit is higher when it chooses Gold, \$21 > \$19, and when Tony's Trinkets chooses Typical, Bitaly's Bracelets' profit is	
	higher when it chooses Silver, \$16 > \$7.	
С	Identify the TWO Nash equilibria for the game as the following:	1 point
Point 3	 Tony's Trinkets chooses Unique, and Bitaly's Bracelets chooses Gold. 	
	 Tony's Trinkets chooses Typical, and Bitaly's Bracelets chooses Silver. 	
D	State that the minimum amount is \$6.	1 point
Point 4		
E	Calculate the new firm's maximum combined profit as \$39 and show your work.	1 point
Point 5	Maximum Combined Profit = $$20 + $19 = 39	

Question 3 Sample 3A Page 1 of 1

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1 Question 2 Question 3

Begin your response to each question at the top of a new page.

3(A). No because if Bitaly's Bracelets makes silver jewlery,
Tony's Trinkets will earn \$20 with Unique jewlery and

\$21 if they produce Typical jewlery. \$20 < \$21 therefore
producing Unique jewlery is not the best choice for Tony's

Trinkets.

(3(B)) Bitaly's Bracelets does not have a dominant strategy because when Tony's trinkers makes unique jewlery it is better for Bitaly's Bracelets to make Gold jewlery as \$21>\$19. Meanwhile if Tony's trinkers makes typical jewlery it is better for Bitaly's Bracelets to make Silver jewlery because \$16>\$7. (3(C)). The Nash equilibria is for Bitaly's Bracelets to make Gold jewlery and Tony's Trinkers to make Unique jewlery or for Bitaly's Bracelets to make Silver jewlery and Tony's Trinkers to make Unique Jewlery or for Bitaly's Bracelets to make Silver jewlery and Tony's Trinkers to make Typical jewlery.

3(D).) \$6

(3(E).) \$20+\$19 = \$39

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Use a pencil or pen with black or dark blue ink. Do NOT write your name. Do NOT write outside the box.

Q5517/04

Question 3 Sample 3B Page 1 of 1

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1 Question 2 Question 3

Begin your response to each question at the top of a new page.

- a) no. if Bitaly's Bracelets produces silver jewelry, then Tony's Trinkets will profit more from making typical jewelry because \$21 > \$20 b) Bitaly's Bracelets does not have a dominant strategy. If Tony's Trinkets makes unique jewelry, then Bitaly's Bracelets profits more from making Coold jewelry because \$21 > \$19. If Tony's Trinkets makes typical jewelry, then Bitaly's Bracelets profits more from making Silver jewelry because \$16 > \$7
- () Bitaly's Bracelets makes Gold jewelly while Tony's Trinkets makes Unique jewelly 2. Bitaly's Bracelets makes silver jewelly while Tony's Trinkets makes typical jewelly d) 16
- e) The Nash equilibrium with the most profit is where Tony's Trinkers makes typical jewelry and Bitaly's Bracelets makes Silver jewelry \$21 + \$16 = \$37

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Q5517/04

Question 3 Sample 3C Page 1 of 1

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1 Question 2 Question 3

Begin your response to each question at the top of a new page.

4) producing Unique jewelry is <u>NOT</u> the best choice for Tony's Trinkets because producing Typical jewelry is cheaper.

B) Bitaly's Bracelets dominant strategy is to produce gold jewelry

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d)#6

E) \$3,000

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Question 3

Note: Student samples are quoted verbatim and may contain spelling and grammatical errors.

Overview

NEW for 2025: The question overviews can be found in the *Chief Reader Report on Student Responses* on <u>AP Central</u>.

Sample: 3A Score: 5

Part A

The response earned point 1 for stating "No" and explaining that if Bitaly's Bracelets chooses Silver jewelry, Tony's Trinkets will earn \$20 by choosing Unique jewelry, \$21 by choosing Typical jewelry, and that \$20 < \$21.

Part B

The response earned point 2 for stating that Bitaly's Bracelets does not have a dominant strategy and explaining that when Tony's Trinkets chooses Unique, Bitaly's Bracelets' payoff is higher when it chooses Gold, \$21 > \$19, and when Tony's Trinkets chooses Typical, Bitaly's Bracelets' payoff is higher when it chooses Silver, \$16 > \$7.

Part C

The response earned point 3 for identifying the two Nash equilibria as Tony's Trinkets chooses Unique and Bitaly's Bracelets chooses Gold, and Tony's Trinkets chooses Typical and Bitaly's Bracelets chooses Silver.

Part D

The response earned point 4 for stating that the minimum amount is \$6.

Part E

The response earned point 5 for calculating the firm's maximum combined profit as \$39 and showing the work.

Question 3 (continued)

Sample: 3B Score: 4

Part A

The response earned point 1 for stating "No" and explaining that if Bitaly's Bracelets produces Silver jewelry, Tony's Trinkets will earn more profit by producing Typical jewelry because \$21 > \$20.

Part B

The response earned point 2 for stating that Bitaly's Bracelets does not have a dominant strategy and explaining that when Tony's Trinkets chooses Unique, Bitaly's Bracelets' payoff is higher when it chooses Gold, \$21 > \$19, and when Tony's Trinkets chooses Typical, Bitaly's Bracelets' payoff is higher when it chooses Silver, \$16 > \$7.

Part C

The response earned point 3 for identifying the two Nash equilibria as Bitaly's Bracelets chooses Gold and Tony's Trinkets chooses Unique, and Bitaly's Bracelets chooses Silver and Tony's Trinkets chooses Typical.

Part D

The response earned point 4 for stating that the minimum amount is \$6.

Part E

The response did not earn point 5 because the response incorrectly calculates the new firm's maximum combined profit as \$37.

Question 3 (continued)

Sample: 3C Score: 1

Part A

The response did not earn point 1 because the response does not explain that if Bitaly's Bracelets chooses Silver jewelry, Tony's Trinkets will earn \$20 by choosing Unique jewelry and \$21 by choosing Typical jewelry, \$20 < \$21.

Part B

The response did not earn point 2 because the response incorrectly states that Bitaly's Bracelets' dominant strategy is to produce Gold jewelry.

Part C

The response did not earn point 3 because the response does not identify the two Nash equilibria as Tony's Trinkets chooses Unique and Bitaly's Bracelets chooses Gold, and Tony's Trinkets chooses Typical and Bitaly's Bracelets chooses Silver.

Part D

The response earned point 4 for stating that the minimum amount is \$6.

Part E

The response did not earn point 5 because the response does not calculate the new firm's maximum combined profit as \$39.