GMAT Integrated Reasoning: Table Analysis 03

Instructions:

The following table provides data on the number of vehicles sold by a car dealership across four different brands and three regions over two consecutive years, Year 1 (Y1) and Year 2 (Y2). For each of the statements below, indicate whether it is true or false based on the information provided. Select "True" if the statement is supported by the data in the table; otherwise, select "False."

Global Auto Sales Performance

Brand	Region	Y1 Sales (Units)	Y2 Sales (Units)	Average Vehicle Price ($)	Advertising Spend ($)
Alpha	North America	15,000	18,000	25,000	2,500,000
Beta	North America	12,000	11,000	35,000	2,000,000
Gamma	North America	20,000	22,000	20,000	3,000,000
Alpha	Europe	10,000	9,500	28,000	2,200,000
Beta	Europe	8,000	8,500	38,000	1,800,000
Gamma	Europe	15,000	17,000	22,000	2,800,000

Alpha	Asia	8,000	10,000	27,000	1,500,000
Beta	Asia	7,000	6,500	37,000	1,400,000
Gamma	Asia	12,000	13,000	21,000	2,000,000
Delta	North America	9,000	10,500	45,000	4,000,000
Delta	Europe	6,000	6,200	48,000	3,500,000
Delta	Asia	5,000	5,500	46,000	3,000,000

Question 1: What was the total number of vehicles sold across all regions for the Gamma brand in Year 2 (Y2)?

- (A) 47,000
- (B) 50,000
- (C) 52,000
- (D) 55,000

Question 2: Which brand had the highest total revenue in Year 1 (Y1) across all regions?

- (A) Alpha
- (B) Beta
- (C) Gamma
- (D) Delta

Question 3: What was the percentage decrease in sales for the Beta brand in Asia from Y1 to Y2?

- (A) 6.8%
- (B) 7.14%

- (C) 7.7%
- (D) 8.2%

Question 4: True or False: The total sales volume for all brands in the North America region in Y2 exceeded the total sales volume for all brands in the Europe region in Y2.

- (A) True
- (B) False

Question 5: True or False: The total advertising spend for the Gamma brand was greater than the total advertising spend for the Delta brand across all regions.

- (A) True
- (B) False

Answers and Explanations

Question 1: The correct answer is **(C) 52,000**. **Explanation:** To find the total units sold for the Gamma brand in Y2, you must sum the Y2 Sales for Gamma across all regions.

- Gamma (North America) Y2 Sales: 22,000
- Gamma (Europe) Y2 Sales: 17,000
- Gamma (Asia) Y2 Sales: 13,000
- Total = 22,000+17,000+13,000=52,000.

Question 2: The correct answer is **(B) Beta**. **Explanation:** Total revenue is calculated as `Sales (Units) x Average Vehicle Price ($)`. You need to calculate this for each brand in Y1 and sum across all regions.

- **Alpha (Y1):** (15,000×$25,000)+(10,000×$28,000)+(8,000×$27,000)=$871,000,000
- **Beta (Y1):** (12,000×$35,000)+(8,000×$38,000)+(7,000×$37,000)=$983,000,000
- **Gamma (Y1):** (20,000×$20,000)+(15,000×$22,000)+(12,000×$21,000)=$982,000,000
- **Delta (Y1):** (9,000×$45,000)+(6,000×$48,000)+(5,000×$46,000)=$923,000,000 Comparing the totals, Beta had the highest revenue at $983,000,000.

Question 3: The correct answer is **(B) 7.14%**. **Explanation:** The percentage decrease is calculated as ((Y1 Sales - Y2 Sales)/Y1 Sales)×100.

- Beta (Asia) Y1 Sales: 7,000
- Beta (Asia) Y2 Sales: 6,500
- Percentage Decrease = (($7,000−$6,500)/$7,000)×100=($500/$7,000)×100≈7.14%.

Question 4: The correct answer is **(A) True**. **Explanation:**

- **Total Sales in North America (Y2):** 18,000+11,000+22,000+10,500=61,500
- **Total Sales in Europe (Y2):** 9,500+8,500+17,000+6,200=41,200
- Comparing the totals, 61,500 (North America) is greater than 41,200 (Europe). Therefore, the statement is True.

Question 5: The correct answer is **(B) False**. **Explanation:**

- **Total Advertising Spend (Gamma):** 3,000,000+2,800,000+2,000,000=$7,800,000
- **Total Advertising Spend (Delta):** 4,000,000+3,500,000+3,000,000=$10,500,000
- Comparing the totals, $7,800,000 (Gamma) is not greater than $10,500,000 (Delta). Therefore, the statement is False.