

Comparison Of Quantities Questions Overview

Comparison Of Quantities Questions have a good weightage in the Banking Exam and the type of question asked in Banking exam is similar to the question mentioned below. It has been solved and explained by Gargi.ai Experts and they have tried to elaborate the concept used in Comparison Of Quantities Questions.

Comparison Of Quantities Questions

Directions: Each question below contains a statement followed by Quantity A and Quantity B. Find both to find the relationship among them. Mark your answer accordingly.

Question

Quantity A: $X^2 + 1$ Quantity B: $2X - 1$

Difficulty : Moderate

Average Time : 38 Seconds

Options :

1. Quantity A > Quantity B
2. Quantity A Quantity B
3. Quantity B > Quantity A
4. Quantity B Quantity A
5. Quantity A = Quantity B or Relation cannot be established

Solution

The correct answer is **Option 1** i.e. **Quantity A > Quantity B**

Set up the initial comparison:

$$X^2 + 1 \text{ ? } 2X - 1$$

Step 1: Subtract $2X$ from both sides to get $X^2 - 2X + 1 \text{ ? } (-1)$

Step 2: Factor the left-hand side to get $(X - 1)^2 \text{ ? } (-1)$

The left-hand side of the comparison is the square of a number. Since the square of a number is always greater than or equal to 0, and 0 is greater than (-1) .

The simplified comparison is the inequality $(X - 1)^2 > -1$ and the resulting relationship is greater than ($>$). In reverse order, each simplification step implies the inequality greater than ($>$) in the preceding comparison. Therefore, Quantity A is greater than Quantity B.

