

RAILWAY | SSC | STATE EXAMS



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: Two quantities A and B are given in the following questions. You have to find the value to both A and B by using your knowledge of mathematics and choose the most suitable relation between the magnitude of A and B from the given options.

Question

Quantity A: Two trains running in opposite direction. After passing eachother can cover their remaining distance in 16 min and 9 min respectively if the speed of slower train is 48 km / hr. Find the difference between speed of both trains. Quantity B: The ratio of age of A and B 3 years ago was 8: 11 And 2 years hence will be 7 : 9. What is the present age of A

Difficulty : Moderate

Average Time : 57 Seconds

Options :

- 1. Quantity A Quantity B
- 2. Quantity A Quantity B
- 3. Quantity A = Quantity B or no relationship can be established

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- 4. Quantity A > Quantity B
- 5. Quantity A Quantity B

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Solution

Correct answer is Option 5 i.e. Quantity A Quantity B

Quantity A:

As we know that when time of train to reach destination after passing each other is given the ratio of speeds is equal to square root of inverse ratio of their time so

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 S_a : S_b = (9 : 16), S_a : S_b = 3 :4, therefore let their speeds be 3x and 4x since 3x = 48

So difference between their speeds = x = 16

Quantity B

Since ratio of their speeds 3 years ago was 8 : 11 and 2 years hence will be 7 : 9 so multiplying 1^{st} by 2 and 2^{nd} by 3 we get new ratios as 16 : 22 and 21 : 27. Therefore let their present age be 16 x and 22x respectively so there age after 5 years = 16x + 5. And 22x + 5 since their ratio after 5 years is also given we get

(22x + 5) / (16x + 5) = 27 / 21

By applying componendo and divinendo we get

(38 x + 10) / 6x = 48 / 6

38 x + 10 = 48 x hence x = 1

So age of A 3 years ago = 16

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Present age = 19.

Quantity A Quantity B.



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