

Data Interpretation Questions Overview

Data Interpretation 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 Data Interpretation Questions.

Data Interpretation Questions

Directions: ABC is the outline of a mountain shaped in the form of a right triangle. A is the top of the mountain. Any person traveling through the sides of the mountain will have his speed affected by the inclination of the mountain. While traveling BA or AB, BC, or CB the speed remains unaffected. When there is an uphill climb of CA, the cos component of speed gets canceled while the sin component helps in up tracking. Similarly while doing down AC, the cos component helps in coming down while other gets canceled. Side AB is 36 km long. (Take $3 = 1.5$)

Question

Abdul descends from A towards C, his speed decreases by 8 km/hr every hour. He reaches C in 2.5 hours. His actual speed (in km/hr) while starting was?

Difficulty : Moderate

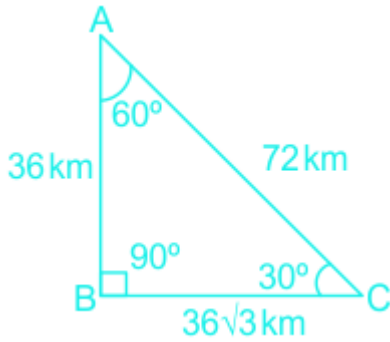
Average Time : 61 Seconds

Options :

1. 64
2. 60
3. 56
4. 48
5. 72

Solution

The correct answer is **Option 1** i.e. **64**



In triangle ABC, $AB = 36$,

$A = 60^\circ$ and $C = 30^\circ$

$\tan 30^\circ = AB/BC$

$1/3 = 36/BC$

$BC = 363$

$\sin 30 = AB/AC$

$1/2 = 36/AC$

$AC = 72$

Let Abdul's initial speed be $2x$

Speed while descending = $2x \times \cos 60 = x$

His speed decreases by 8 km/hr every hour, since he is coming down, actual decrease in speed = $8 \times \cos 60 = 4 \text{ km/hr}$

Distance travelled in 2.5 hours = $x + (x - 4) + 1/2 \times (x - 4 - 4) = 2.5x - 12$

$2.5x - 8 = 72$

$2.5x = 80$

$x = 32 \text{ km/hr}$

His actual speed = $2x = 64 \text{ km/hr}$

