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Bilal can finish a work in 10 days. Finished? Jalal is twice as efficient as Bilal. If they work together, how many days will the work be finished?

A. 3 days

B. 6 days

C. 7 days

D. None of these

Show Answer...

Correct Answer: A. (3 days)

Explanation:

Let's find out how much work Bilal and Jalal can do in one day individually.

Bilal can finish the work in 10 days, so his work rate per day is 1/10 (representing the fraction of work he completes each day).

Jalal is twice as efficient as Bilal, so his work rate per day is 2 * (1/10) = 1/5(twice Bilal's work rate).

Now, let's calculate their combined work rate when they work together:

Combined work rate = Bilal's work rate + Jalal's work rate

Combined work rate = 1/10 + 1/5

Combined work rate = 1/10 + 2/10

Combined work rate = 3/10

To find out how many days it would take them to finish the work together, we divide 1 (the total work) by their combined work rate:

Time taken together = 1 / Combined work rate

Time taken together = 1/(3/10)



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Time taken together = 1 * (10/3)finished?

Time taken together = 10/3

Now, we convert this improper fraction to a mixed fraction:

Time taken together = $3 \frac{1}{3} = 3.33 \text{ days}$

Since we cannot have a fraction of a day, we round it up to the nearest whole day. So, the work will be finished in 3 days.

Therefore, the correct answer is B (3 days).