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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 $=1 /(3 / 10)$

Bilal can finish a work in 10 days. Jalal is twice as efficient as Bilal. If they work together, how many days will the work be Time taken together $=1 *(10 / 3)$
Time taken together $=10 / 3$
Now, we convert this improper fraction to a mixed fraction:
Time taken together $=31 / 3=3.33$ 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).

