



12. Karen has three times the number of cherries that Lionel has, and twice the number of cherries that Michael has. Michael has seven more cherries than Lionel. How many cherries do Karen, Lionel and Michael have altogether?
- A 12 B 42 C 60 D 77 E 84

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12. **D** Let Lionel have x cherries. Michael then has $(x + 7)$ cherries. Karen's number of cherries is described in two ways. She has $3x$ cherries and also $2(x + 7)$ cherries. So $3x = 2x + 14$ and therefore $x = 14$. Lionel has 14 cherries, Michael 21 cherries and Karen 42 cherries giving a total of $14 + 21 + 42 = 77$ cherries.