

## Answer on Question #43564 - Chemistry - Physical Chemistry

### Question:



If 6 moles of A are reacted with 4 moles of B, how many moles of C could form?

- a) 2
- b) 3
- c) 4
- d) 5

### Answer:

Chemical reaction:



From this reaction, we can see that it needs to be in two times more substance A than B. According to the chemical reaction: if all substance A (6 mole) react with substance B(3 mole) then after chemical reaction there will be no more substance A, however, the one mole of substance B will remain. Therefore, the substance B is in excess. Hence, we should calculate the number of moles of substance C using dates of substance A.

According to the chemical equation, 2 moles of the substance A yields 1 mole of the substance C. That's why from 6 moles of the substance A we can obtain 3 moles of the substance C.