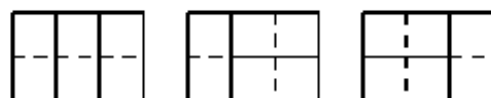


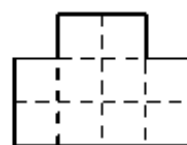




8. A 2×3 grid of squares can be divided into 1×2 rectangles in three different ways.



How many ways are there of dividing the bottom shape into 1×2 rectangles?

- A 1 B 4 C 6 D 7 E 8



8. C The 1×2 rectangles can appear in two different ways: A  or B .

If, in the given shape, A forms the top 1×2 rectangle then the possible different ways to fill the remaining 2×4 rectangle are, from left to right:

A, A, A, A; A, A, B, B; B, A, A, B; B, B, A, A; B, B, B, B.

If A does not form the top 1×2 rectangle, then the only possible way is to use 4B and an A. Hence there are 6 ways of dividing the given shape into 1×2 rectangles.