Hints on 1 and 2.12

1) If you are puzzled by b), please refer to the 2nd paragraph of Deen 2.10. It's essentially the same problem.

2.12) i) In the tutorial, we mentioned concentration = Co, flux=0, flux matching across a boundary. Perhaps you would also like to consider concentration matching across a boundary. ii) If you see a volumetric reaction rate, but your reaction takes place on an area, chances are you're right about wanting to find an alternative expression for your reaction rate. iii) Consider the boundary conditions and concentration profile at steady state in the example done in lecture today. See any similarity? Hope this helps.