

2.32 Find an expression for the entropy of the two-dimensional ideal gas considered in Problem 2.26. Express your result in terms of U , A , and N .

Problem 2.26: Consider an ideal monatomic gas that lives in a two-dimensional universe ("flatland"), occupying an area A instead of a volume V . By following the same logic as above, find a formula for the multiplicity of this gas, analogous to equation 2.40.