Dimensions of all 23 subalgebras of 1D translational invariant Hamiltonians Algebra 0 Algebra 1 Algebra 2 10^{4} Algebra 3 Algebra 4 Algebra 5 Algebra 6 Algebra 7 Algebra 8 Algebra 9 Algebra 10 10^{3} Algebra 11 Algebra 12 Algebra 13 Algebra 14 Algebra 15 Algebra 16 Algebra 17 Algebra 18 Dim Algebra 19 10^{2} Algebra 20 Algebra 21 Algebra 22 10^{1} 10^{0}

 2^N

 $10^{\overline{2}}$

 10^{1}