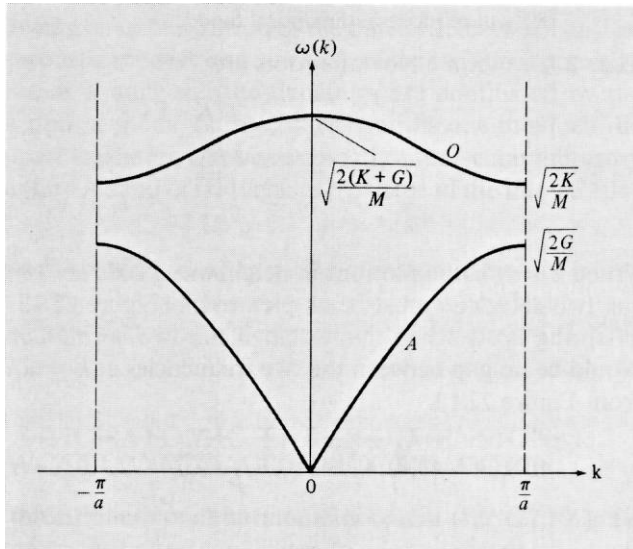


Phys 231, Fall 2007, Quiz 3, Oct 15

Your name:



Above, the textbook diagram of normal modes for di-atomic chain with alternating spring constants K, G are shown. For all the three special frequency values noted in the diagram, sketch the normal mode. Choose one of the two modes at the zone boundary, and re-derive the frequency by solving the Newton's equation for that particular motion you have sketched above.