Show that is it impossible to have a tetrahedron whose six edges have lengths 10, 20, 30, 40, 50 and 60 units.

Is it possible for a tetrahedron to have edges of lengths 10, 20, 25, 45, 50 and 60 units?

Can you write a set of general rules for someone else to use to check whether a given six lengths could form the edges of a tetrahedron?

