Answer on Question #78761 – Math – Analytic Geometry

Question

Given any two conics C_1 and C_2, at least one element of $R \times R$ will belong to $C_1 \cap C_2$. Is the statement true? Give reason for your answers either with a short proof or a counterexample.

Answer

The statement is false. For example, if two planes intersecting cone are parallel then the given statement is false.