

Second order arithmetic

Source: <http://sci.tech-archive.net/Archive/sci.logic/2007-10/msg00347.html>

- *From:* djrt20@xxxxxxxxxxx
 - *Date:* Thu, 11 Oct 2007 10:46:08 -0700
-

Godel's theorems are in the context of first order logic. I have a little knowledge about them, but I have very little knowledge about second order logic. I have read that the completeness theorem, amongst other things, fails for second order logic.

More specifically, obviously the formal system of second order arithmetic can't give us an algorithmic procedure for deciding the truth of arbitrary arithmetical statements. What kind of arithmetical statement, then, is unprovable by the means of second order arithmetic?

.