Homework: Apr 26, 2022. Number Theory.

W Stephen Wilson

10-2 # 1, # 2, and # 3

Which of the following have solutions?

4 $x^2 \equiv 7 \pmod{53}$,

5 $x^2 \equiv 53 \pmod{7}$

6 $x^2 \equiv 14 \pmod{31}$,

7 $x^2 \equiv 625 \pmod{9973}$