This homework invites you to solve simple quadratic equations modulo n. Please show all of your work; answers without work will not earn any points. Give all solutions to the following equations:

1. $x^2 \equiv 19 \pmod{30}$

2. $x^2 \equiv 59 \pmod{135}$

3. $x^2 \equiv 25 \pmod{40}$