Math 255 - Spring 2018 Suggested problems - Solving $x^2 \equiv a \pmod{p^k}$

There will be a quiz on this topic on Monday April 30.

- 1. Please give all solutions to the following equations:
 - (a) $x^2 \equiv 71 \pmod{125}$
 - (b) $x^2 \equiv 58 \pmod{81}$
 - (c) $x^2 \equiv 39 \pmod{343}$
 - (d) $x^2 \equiv 89 \pmod{121}$