Suggested problems - Solving $x^2 \equiv a \pmod{m}$

There will be a quiz on this topic on Friday May 4.

1. Please give all solutions to the following equations:

   (a) $x^2 \equiv 1 \pmod{56}$

   (b) $x^2 \equiv 70 \pmod{105}$

   (c) $x^2 \equiv 59 \pmod{135}$

   (d) $x^2 \equiv 34 \pmod{135}$

   (e) $x^2 \equiv 25 \pmod{80}$