QUIZ

You know how to factor 21 but lets carry out the steps of the quadratic sieve for it.

- **Step 1**. Find three integers a_1, a_2, a_3 such that $c_i = a_i^2 \mod 21$ are 5-smooth. (You should only need to test 5 integers.)
- **Step 2**. Take the square root of the product $c_i c_j$ for appropriate i, j to get B. Let $A := a_i a_j$ be the corresponding product of a_l.
- **Step 3**. Compute the $\gcd(A - B, 21)$ for A and B found in Steps 1 and 2. Did you factor 21?