

Week 2 Wednesday

Anywhere

Turn to someone sitting near you who you haven't met before (or who you haven't talked to much before), and introduce yourself! Then discuss:

If you could live anywhere on this planet, where would you choose to live and why?

GCDs and Modular Inversion

1. Which of the following integers is invertible mod 210?

(A) 3

(B) 4

(C) 5

(D) None of the above

2. How many divisions do we need to do till we see a remainder of 0 when we use the Euclidean algorithm to compute $\text{gcd}(150, 90)$?

- (A) 1
- (B) 2
- (C) 3
- (D) None of the above

3. Find Bézout coefficients for $\gcd(150, 90)$.

4. Find an inverse of 54 mod 131, if possible.