

Algebraic and Geometric Methods in Engineering and Physics

Homework 3

Due on October 4

- Compute the order of \mathbb{Z}_{187}^* .
 - Find the multiplicative inverse of $[18] \in \mathbb{Z}_{187}$.
 - Find a decryption exponent d corresponding to the encryption exponent $e = 7$ in \mathbb{Z}_{187} .
- In seven years I will be twice the age you were when I was your age. What can possibly be our ages?