Exercise 03

## 3.3 Question 3

3.3.A In the Diffie-Hellman protocol, each participant selects a secret number x and sends the other participant  $g^x \mod p$  for some public number g. What would happen if the participants sent each other  $x^g$  for some public number g instead? Give at least one method Alice and Bob could use to agree on a key. Can Eve break your system without finding the secret numbers? Can Eve find the secret number