Public Key Exchange

Partner Alpha

Follow these steps to establish a secret key in public!

Instruction	#	Value
Instruction	#	value
Choose a secret integer, a, between 1 and 10,		
and write it down.	а	
Calculate A = 5^{a} mod 13 and write it down.	А	
		I
Announce your value A to your partner.		
Write down the value B that your partner tells		
you.	В	
<u>·</u>		
Calculate s = B ^a mod 13, and write it down.	s	
	Choose a secret integer, a, between 1 and 10, and write it down. Calculate A = 5 ^a mod 13 and write it down. Announce your value A to your partner. Write down the value B that your partner tells you.	Choose a secret integer, a, between 1 and 10, and write it down. a Calculate A = 5ª mod 13 and write it down. A Announce your value A to your partner. A Write down the value B that your partner tells you. B

Congratulations! You and your partner should now know the same secret number, s. Your eavesdroppers should not be able to determine the value of s.

Public Key Exchange

Partner Beta

Follow these steps to establish a secret key in public!

Step	Instruction	#	Value
	Choose a secret integer, b, between 1 and 10,		
1	and write it down.	b	
2	Calculate B = 5 ^b mod 13 and write it down.	В	
3	Announce your value B to your partner.		
	Write down the value A that your partner tells		
4	you.	А	
5	Calculate s = A ^b mod 13, and write it down.	s	

Congratulations! You and your partner should now know the same secret number, s. Your eavesdroppers should not be able to determine the value of s.