Quiz: Encryption and Decryption (Remotely Proctored)

Due Jan 27 at 3:30pm **Points** 9 **Questions** 9 **Time Limit** 10 Minutes

Exam Requirements A webcam is required to take this exam.

Exam Security This exam will be monitored by **Proctorio**. Learn more about Proctorio (https://proctorio.zendesk.com/hc/articles/200972514).

Instructions

This is an individual quiz with a 10 minutes limit. The quiz will be proctored using Proctorio.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	4 minutes	9 out of 9

Score for this quiz: **9** out of 9 Submitted Jan 26 at 9:34pm This attempt took 4 minutes.

	Question 1	1 / 1 pts
	What is symmetric key encryption?	
	It is an encryption method where the parties involved have the same information.	mation.
	It is an encryption method where only symmetric messages are encrypted.	
Correct!	It is an encryption method where both parties use the same common secret k encrypt and decrypt messages.	ey. to
	It is a encryption method where the key that is symmetric left-to-right and righ	t-to-

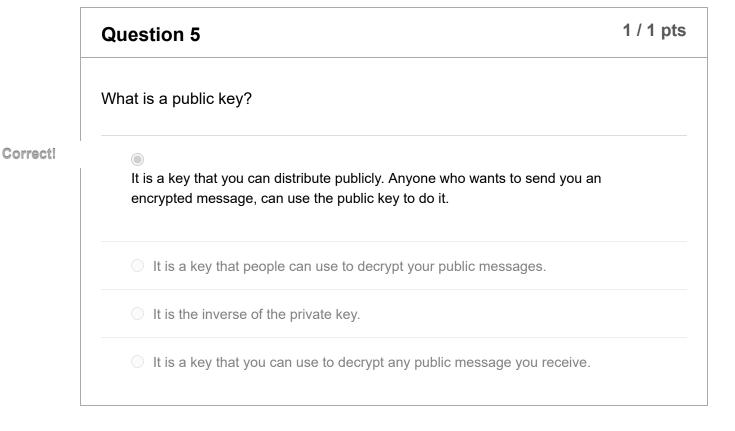
Question 2	1 / 1 pts
What is asymmetric key encryption?	
An encryption method that encrypt only asymmetric messages.	
The same as symmetric key encryption.	
An encryption method where the key is asymmetric.	
An encryption method where the key to encrypt messages is different decrypt messages.	ent from the key to
Question 3	1 / 1 pts
How many symmetric keys are needed if a group of 10 people communicate among themselves?	
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How many symmetric keys are needed if a group of 10 people communicate among themselves?	
O 100	
How many symmetric keys are needed if a group of 10 people communicate among themselves? 50 100 20 45 n(n-1)/2=45 Here is the intuition: we need as many symmetric keys as poss	need to
How many symmetric keys are needed if a group of 10 people communicate among themselves? 50 100 20 45 n(n-1)/2=45	need to

Correct!

Correct!

How many asymmetric keys are needed if a group of 10 people need to communicate among themselves? 20 2n. Each person need to develop 1 private and 1 public key. 45 50 100

Correct!



Question 6	1 / 1 pts
What is a private key?	

It is a key that you can distribute publicly. Anyone who wants to send you an encrypted message, can use the public key to do it.
It is a key that no-one, including you, know what it is.
It is a key that you use to encrypt messages.
It is a key that you need to keep private, and you can use to decrypt messages encrypted using your public key.

Correct!

	Question 7	1 / 1 pts
	What is the main reason why the RSA asymmetric encryption method wor	·ks?
	Because the method is being kept a secret, and no-one knows how it works	
	Because multiplying very large prime numbers is hard to do, even with supercomputers.	
Correct!	Because factorization (finding prime numbers of very large numbers) is very har even for super computers.	rd
	Because it is very complicated.	

Question 8	1 / 1 pts
What is 54 modulo 10	
O 10	

Correct!	4		
	O 50		
	O 54		

	Question 9	1 / 1 pts
	What does it mean to sign a message?	
Correct!	It means to prove that you know the private key that generated the public k	ey.
	It means to encrypt a message using a signature key.	
	It means to provide a signature so that encryption is legally enforceable.	
	It means to decrypt a message using a signature key.	

Quiz Score: 9 out of 9