Name _____

1.  Briefly describe buffer overflow.  What are the consequences of it occurring?  How can it be mitigated?

2.  Briefly describe integer overflow.  What are the consequences of it occurring?  How can it be mitigated?

3.  List two dangerous C functions and what you should use instead.

4.  What did the example show in the Ken Thompson paper 'Reflections on Trusting Trust'? Describe the example, not the overarching theme of the paper.

5.  What does STRIDE stand for?  More specifically, what does each of the letters represent? What does STRIDE help us with?

6. What does DREAD stand for?  Where is it important?

7. What kind of exploit was Heartbleed built on?

8. How does symmetric key exchange work?

9. How does asymmetric key exchange work?

10. What are the three main steps in the RSA algorithm?

11. Write a regular expression to validate a Social Security Number (123-45-6789 or 123456789 are valid).

12. Briefly describe a Cross Site Scripting attack.  Where is the vulnerability?  What mitigates it?

13. Briefly describe a Cross Site Request Forgery attack.  Where is the vulnerability?  What mitigates it?

14. Briefly describe SQL injection.  Where is the vulnerability?  How can you mitigate it?

15. What is Can0nica1ization concerned with?

16. What is a race condition?

17. What is information leakage?  Give an example.