**Network Security**

**Worksheet A**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Problem Number*** | ***Answer*** | ***Password*** | ***Encrypted Message*** |
| 1 | -3, -2, -1, 0 | -3-2-10 | Alright you answered the first problem correctly. Give problem 2 a try! |
| 2 | y = x - 2 | y=x-2 | Good job! Proceed to your next problem. |
| 3 | y = x | y=1/3x | Keep up the good work! |
| 4a | y = x + 1 | y=x+1 | You’re getting good at this! |
| 4b | y= | y=-x/2 | Keep going |
| 5 | Linear; The graph is a line | linear | You got this! |
| 6 | Nonlinear; The graph is not a line | nonlinear | Great job! |
| 7 | Nonlinear; The area increases by different amounts as the side length increases by one | nonlinear | Congratulations, you’ve successfully decrypted each problem and completed your work with accuracy! |

**Worksheet B**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Problem Number*** | ***Answer*** | ***Decryption Password*** | ***Encrypted Message*** |
| 1 | Lou: 20, 30  Gene: 17, 32 | 1732 | Good job, keep working and remember to read all directions and questions carefully. |
| 1b | Lou: y = 2x + 10  Gene: y = 3x + 2 | 1732 | For each person, write an equation that describes the function shown by the table. Be sure to label each equation for each person. |
| 1c | Lou: 50 Video Games  Gene: 62 Video Games | y = 3x+2 | Use the equations in part (b) to determine how many video games they would each have if ***they continued the same pattern for ten additional weeks.*** |
| 1h | y = 4x + 20  24, 28, 44 | 13 weeks | Create an input-output table and write an equation that represents a person starting with 20 video games and buying 4 new video games each week. \*\*Remember to give your person a name. |