****

**Flowchart**

**Study Sheet**

**Name: …………………. Grade / Section: ….**

**Date: …………………. 1st Semester 2022/ 2023**

**A program flowchart is a diagrammatic way of representing an algorithm used to produce the solution to a problem. A flowchart consists of symbols, connected to each other by arrows which indicate the path to be followed when working through the flowchart. Each different shape symbol represents a different stage in the process.**

|  |  |  |
| --- | --- | --- |
| **Symbol** | **Name** | **Action** |
|  | **Start / Stop** | **This shape shows the beginning and end of a sequence.****A sequence is the order in which one task follows another.** |
|  | **process** | **This shape shows a command.****A command is a specific instruction.** |
|  | **Decision**  | **This shape shows “Yes” or”No” decision.** |
|  | **Input /Output** | **This shape shows where data are being received or sent from a computer program.**  |
|  | **Arrows** | **These arrows show the way we move through the sequence from symbol to symbol.** **The direction of flow .** |

1. **Draw a flowchart to calculate and print the Area of a rectangle.**

**Formula 🡪 A=L\*W**

A: Area

L: Length

W: Width

1. **Draw a flowchart to input, calculate and print the average of three numbers.**

A: Number1

B: Number2

C: Number3

**Formula 🡪 Average=(A+B+C)/3**

1. **Draw a flowchart which ask the user to input his/her grade and to print
 “Pass” if the grade is greater than or equals to 50 and print “Fail” if not.**
2. **Draw a flowchart which ask the user to Input a number, determine if the number is odd or even then print the number and the text “is odd”/ “is even”.**

**(Example Output: 5 is Odd)**