



Republic of the Philippines
Department of Education
National Capital Region
Schools Division Office – Muntinlupa City

SPTVE COMPUTER SYSTEMS SERVICING 7
Quarter 3/Week 3

I. Topic: Prepare and Interpret Technical Drawing

II. Objectives:

1. identify basic symbols used in technical drawings.
2. determine the functions of diagrams.
3. value the importance of diagrams in business system.

III. Brief Introduction of the Lesson

The lesson deals with the understanding of concepts and principles in preparing technical drawings.

Flowchart

A flowchart is a diagram that uses graphic symbols to depict the nature and flow of the steps in a process. Another name for this tool is "flow diagram."

What Are the Elements of a Flowchart?

A flowchart is commonly used by systems analysts to visualize the series of processes in a business system. A flowchart is a useful tool to design an efficient business system and to troubleshoot or improve an existing system. A flowchart consists of elements, such as the terminator, process, sub-process, decision, arrow lines, and connectors.

1. Terminator - A terminator is represented by a small rectangle with curved corners. A terminator appears at the start and the end of a flowchart. The end terminator appears only once on a single flowchart.
2. Process- A process is represented by a rectangle. It refers to an action in a business process. It must be described clearly and concisely. A process can be described using a single verb-noun phrase; for example, "Order Office Supplies." The same level of detail must be kept in processes on a single flowchart.
3. Sub-process- A sub-process is represented by a rectangle with double lines on each side. A subprocess is a major process that could be broken up into simpler processes developed into another flowchart.
4. Decision - A decision is represented by a diamond. A process that can answer a decision of "yes" or "no" requires a decision box.
5. Connector - A connector is represented by a small circle or a connector box and is labeled using letters. A flowchart written on a single page is clearer than a flowchart on several pages.
6. A connector ensures that the processes are connected logically and correctly on several pages.
7. Arrow Line- Arrow lines drawn in one direction, preferably from top to bottom, keep a flowchart clear.





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Basic Flowchart Symbols

The symbols that are commonly used in flowcharts (Viewgraph 3) have specific meanings and are connected by arrows indicating the flow from one step to another:

1. Oval - Ovals indicate both the starting point and the ending point of the process steps.
2. Box - A box represents an individual step or activity in the process.
3. Diamond - A diamond shows a decision point, such as yes/no or go/no-go. Each path emerging from the diamond must be labeled with one of the possible answers.
4. Circle - A circle indicates that a particular step is connected to another page or part of the Flowchart. A letter placed in the circle clarifies the continuation.
5. Triangle - A triangle shows where an in-process measurement occurs.

IV. Activities:

Activity 1 - "MATCH ME"

Directions: Match Column A with Column B. Write only the letter of the correct answer on a separate sheet of paper.

Column A

1. It is represented by a rectangle. It refers to act in a business process.
2. It is represented by a diamond. A process that can answer a decision of "yes" or "no" requires a decision box
3. It is represented by a small circle or a connector box and is labeled using letters.
4. Drawn in one direction, preferably from top to bottom to keep a flowchart clear.
5. A process is represented by a rectangle with e. Sub-process double lines on each side.

Column B

- A. Decision
- B. Process
- C. Arrow line
- D. Connector

Activity 2

Directions: Match Column A with Column B. Write only the letter of the correct answer on a separate sheet of paper.

Column A

1. Indicates that a particular step is connected to

Column B

A.





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another page or part of the flowchart

2. Shows a decision point, such as yes/no or go/no-go

3. Indicates both the starting point and the ending point of the process steps

4. Shows where an in-process measurement occurs.

5. Represents an individual step or activity in the process

B.



C.



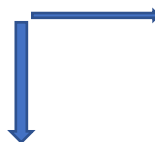
D.



E.



F.



V. Assessment: “DRAW ME”

Directions: Using the basic symbols used for the flowchart, make your simple flow chart to illustrate the process of cleaning the computer parts and peripherals properly. Include the given activities below. Write your answer on a separate sheet of paper.

1. Preparation of cleaning tools
2. Identifying the parts to be clean
3. Cleaning the different peripherals

Scoring Rubrics

Preparation of Flowcharts	4	3	2	1
Drawing	All assigned details and elements have been added. The details are clear and easy to	Almost all assigned details/elements (at least 85%) have been added. The details are clear and easy to identify.	Almost all assigned details and elements (at least 85%) have been added. A few details are difficult to identify.	Fewer than 85% of the assigned details and elements are present OR most details are difficult to identify.





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VI. Reflection:

Directions: Answer the following questions. Write your answer on a separate sheet of paper.

1. How important do these shapes in technical drawing?

2. What do you think will happen if we don't have those shapes?

References:

- *k_to_12_pc_hardware_servicing_learning_module.pdf*
- <https://www.scribd.com/document/420149355/Lesson-4-Prepare-and-Interpret-Technical-Drawing>

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