1. State the rules for creating data names.

* **Names must be between 1-30 characters**
* **Names must include at least one alphabetic character**
* **Names cannot include spaces**
* **Names cannot start or end with a hyphen**
* **Names can consist of the following characters**
  + **A-Z, a-z, 0-9, hyphen**
* **Ideally, the name should be unique within the program**
* **Reserved words are not permissible**

1. What is the purpose of the PICTURE clause?

The picture clause provides information about the type of data stored and the size of the storage area for the item.

1. What symbol represents the following in a PIC clause?

X alphanumeric data

A alphabetic data

9 numeric data

V decimal point

S signed

1. Explain the difference between Alphanumeric and Numeric Literals.

Alphanumeric literals can contain letters, numbers, and spaces. Numeric literals can only contain numbers, along with optional + or – signs.

1. What is the purpose of the FILLER clause?

To show that data is present, but you have no interest in accessing it.

1. Why would you use the VALUE clause?

To put figurative constants into a variable

1. Give examples of the figurative constants.

VALUE ZERO.

VALUE SPACE.

1. Give the characteristics of an elementary item. (Look throughout the chapter)

1. Give the characteristics of a group item. (Look throughout the chapter)
2. Identify whether the following are valid or invalid. Identify the rule violated if invalid.

Variable Names:

99 invalid – must contain at least one alphabetic character

-ABC invalid – cannot begin or end with a hyphen

99-ABC valid

XYZ-1 AB invalid – cannot contain spaces

BOATING-SEASON-IS-COMING valid

PICTURE valid

RM-BANK-ACCT- invalid – cannot begin or end with a hyphen