1. Which function executes first: Add or Subtract?
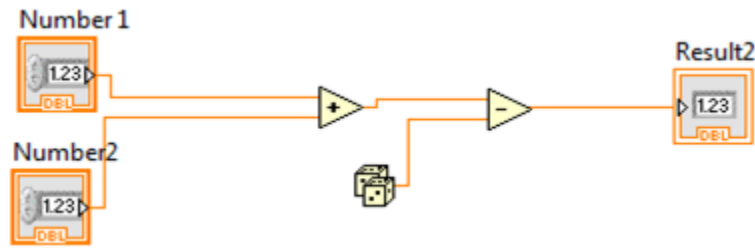

a. Add
b. Subtract
c. Unknown

2. Which structure must run at least one time?
a. While loop
b. For loop

3. Which color represents an integer data type ?

a. Orange
b. Green
c. blue
d. Pink

4. A coercion dot indicates that:
a. The data types are consistent
b. A polymorphic operation will be performed on the data
c. A data buffer is created to handle data conversion
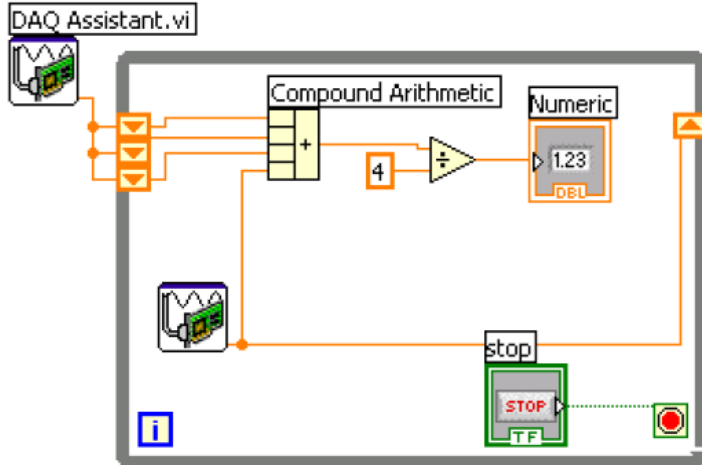**d**. Data values are being coerced because they are out of range

5. Formula nodes accept which of the following operations?
a. Basic programming language instructions *Input* and *Print*
b. Embedding of SubVIs within the Formula Node
c. Pre and post increment (++) and decrement (--) as in the C language
d. The use of nested Formula Node structures

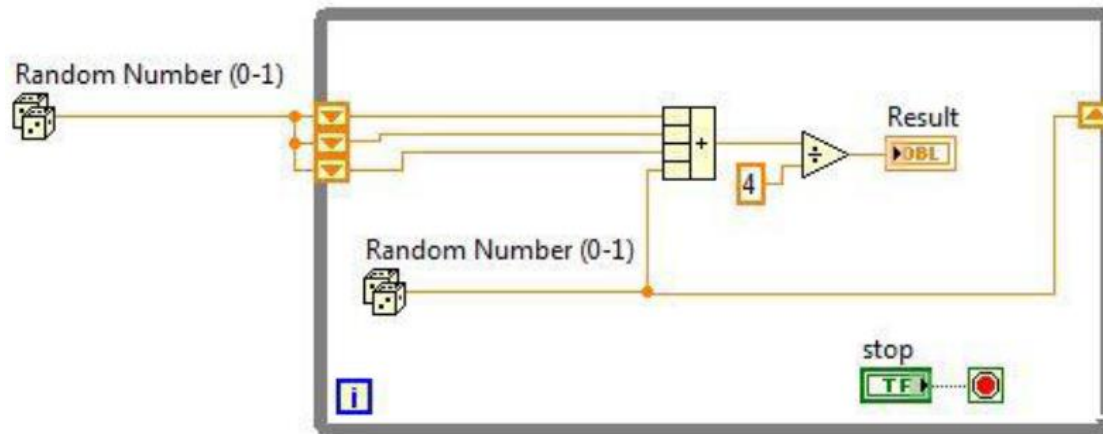**6. The Wait function can be added to While Loops:**
a. To free up available memory.
b. To allocate memory used by the CPU.
c. To allow the processor time to complete other tasks.
d. To reserve which processor the code is running on.

7. Which of the following accurately describes the output that results from execution of the following loop?

a. The last three values from the DAQ Assistant will be displayed.
b. A running average of all measurements will be displayed.
c. An average of the last four measurements will be displayed.
d. None of the above

8. Which of the following accurately describes the output that results from execution of the following loop?

a. The last three values from the Random Number function will be displayed.

b. A running average of all measurements will be displayed.

c. An average of the last four measurements will be displayed.

d. None of the above

9. Which of the following statements is NOT valid:
a. You can make a Cluster of Clusters.
b. You can make an Array of Arrays.
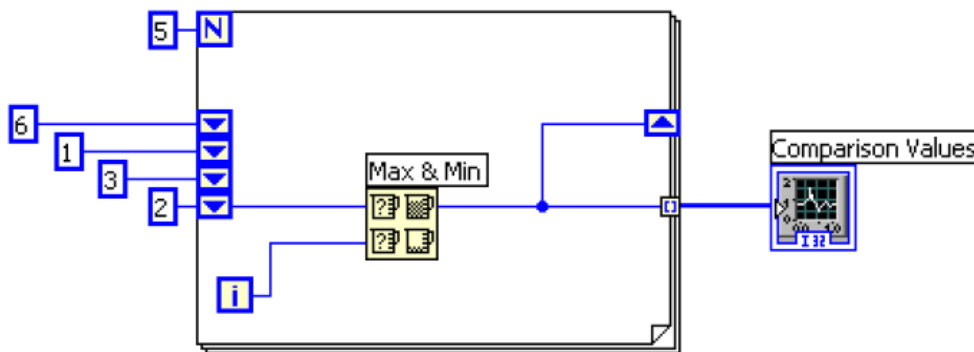c. You can make a Cluster of Arrays.
d. You can make an Array of Clusters.

10. Which of the following statements is true?
a. The default setting for a tunnel into or out of a For Loop has auto-indexing enabled if the data being passed is an array.
b. The default setting for a tunnel into or out of a While Loop has auto-indexing disabled if the data being passed is an array.
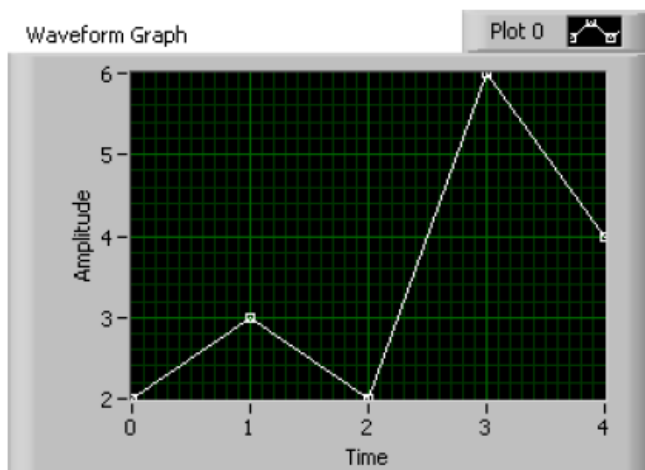**c.** Both A. and B. are true
d. None of the above

11. Which of the following statements is true regarding the use of Coercion Dots?
a. Coercion Dots improve program performance.
b. Coercion Dots represent a conversion from one data type to another.
c. Coercion Dots increases memory usage
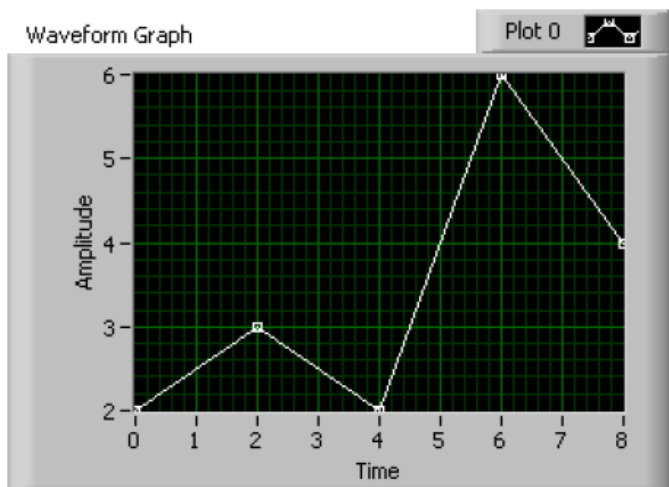**d**. Both A. and B.
e. Both B. and C.

12. Which of the following graphs matches the result in Comparison Values after the following code has executed?
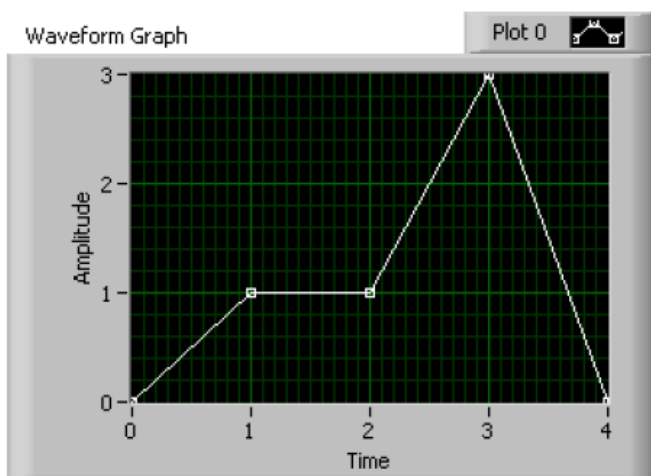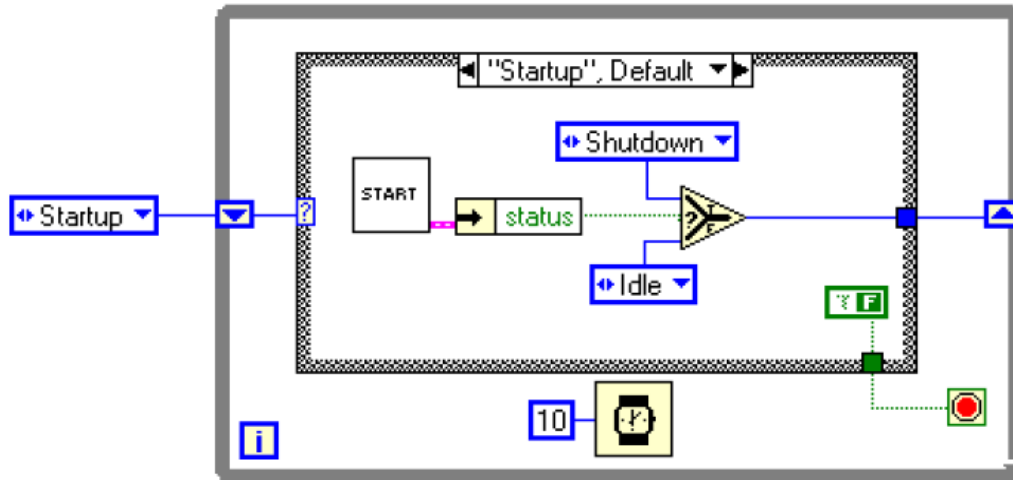

A.

B.

C.

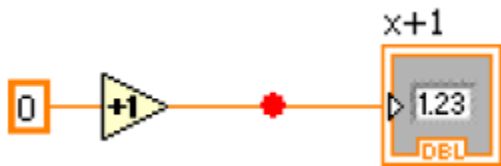**13. The following figure is an example of which common type of VI architecture?**

a. Multiple Case Structure VI
b. General VI
c. State Machine VI
d. Parallel Loop VI

14. You can use all of the following data types as inputs to the case selector terminal except:

a. Doubles
b. Enumerated type values
c. Strings
d. Integers

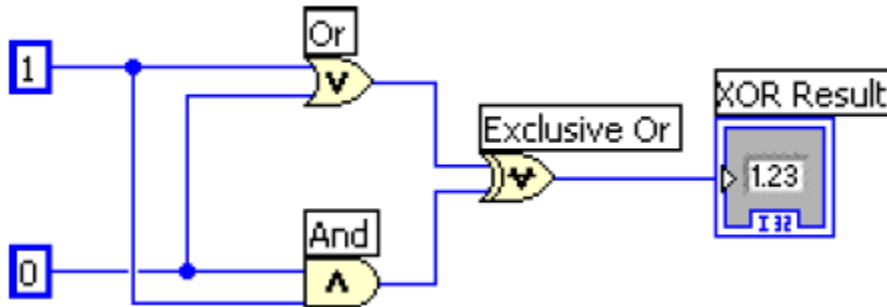**15. The following breakpoint does which of the following:**

a. Causes the VI to abort
b. Causes the VI to pause
c. Causes the VI to single step over the addition
d. Causes the VI to single step over the indicator

16. Which of the following is NOT a component of an Error Cluster?

a. Status.
b. Code.
c. Source.
d. VI name

17. What is the value in XOR Result after the following code has executed?

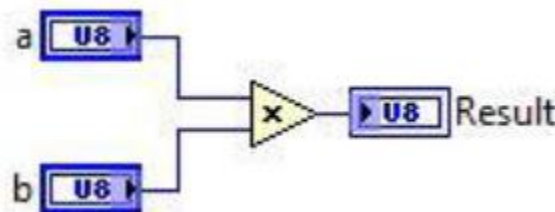
a. 0
b. 1
c. True
d. False

18. Which of the following statements regarding the index of Arrays are NOT true:
a. The index is used to access a particular element of an Array.
b. The index ranges from 1 to n.
c. A 2-D Array has both a column index and a row index.
d. The index ranges from 0 to n-1.

19. Which of the following does not conform to the Dataflow programming paradigm?

a. Shift Registers
b. Tunnels
c. SubVIs
d. Local variables

20. If the value in a is 2 and b is 128, what value does the Result indicator display after the VI executes?
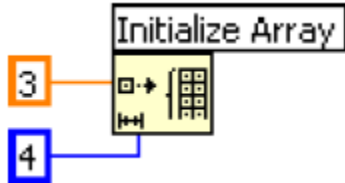

a. -128
b. 0
c. 255
d. 256

21. Which of the following functions assembles Cluster elements by their owned labels?

a. Unbundle by Name
b. Unbundle
c. Bundle by Name
d. Bundle

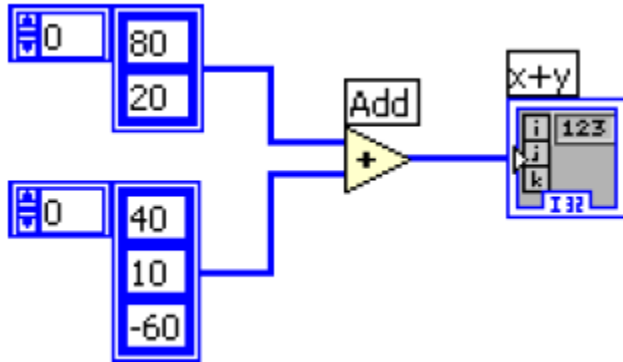**22. What is the output of the Initialize Array function after the following code has executed?**

a. 1-D Array of {3, 3, 3, 3}
b. 1-D Array of {4, 4, 4}
c. 1-D Array of {3, 4}
d. 1-D Array of {4, 3}

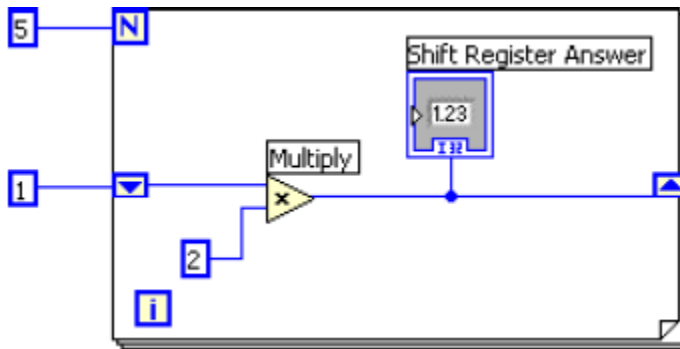**23. In what instance would you use the Probe tool rather than Highlight Execution?**

a. To see the flow of data
b. To see the value of a wire in real-time
c. To look into a SubVI, as the process is running
d. To slowdown the VI and show data values in wires

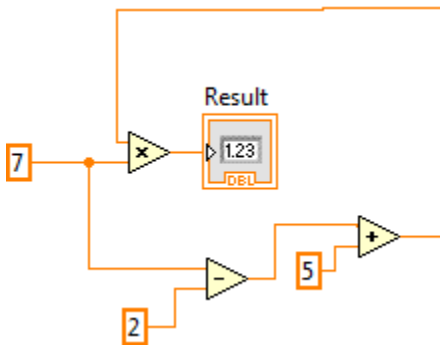**24. What is the result of the following Array addition?**

a. 1-D Array of {80, 20, 40, 10, -60}
b. 1-D Array of {120, 30, -60}
c. 1-D Array of {120, 30}
d. 2-D Array of {{120, 90, 20}, {60, 30, -40}}

25. What is the value in <u>Shift Register Answer</u> after the following code has executed?

a. 16
b. 24
c. 32
d. 10

26. In the figure below, what will Result equal when this calculation is executed?

a. 55
b. 70
c. 65
d. Indeterminate