**Question 1 (1 point)**

A program loads the value $2100 into register D, then loads $30 into register B, then loads $20 into register A. What will be the contents of register D?

Question 1 options:

|  |  |
| --- | --- |
|  | the contents of memory location $2100 |
|  | $2100 |
|  | $2030 |
|  | $3020 |

**Question 2 (1 point)**

A Phasing Error is caused by which of the following situations:

Question 2 options:

|  |  |
| --- | --- |
|  | A Label is defined with the same name more than once in a program |
|  | Short Branch Instruction has exceed its +/- Limitation |
|  | More than two **org** statements appear in a program |
|  | Long Branch Instruction has exceed its +/- Limitation |

**Question 3 (1 point)**

How many bytes of memory does the folloiwing Assembly Language line of code use?  
NUMBER equ $1234

Question 3 options:

|  |  |
| --- | --- |
|  | No memory is used |
|  | 1 byte |
|  | 1234 bytes |
|  | 2 bytes |

**Question 4 (1 point)**

What hexademical value is loaded into Accumulator B in the following code snippet?  
ldab #%10101010

Question 4 options:

|  |  |
| --- | --- |
|  | $66 |
|  | $154 |
|  | $1010 |
|  | $AA |
|  |  |

**Question 5 (1 point)**

In constant offset indexed addressing mode the Effective Address is calculated by which of the following methods?

Question 5 options:

|  |  |
| --- | --- |
|  | By using a constant value to offset PC in the next instruction |
|  | By adding a constant value to the contents of the Index Register |
|  | By using a constant value to post increment the Index Register |
|  | By using a constant value to pre increment the Index Register |

**Question 6 (1 point)**

In this question, the X register is used as a pointer. If X originally points to address $1028 before the instruction executes, what address does X point to after the instruction has been executed?  
ldd 2,x+

Question 6 options:

|  |  |
| --- | --- |
|  | $102A |
|  | $1030 |
|  | |  |  | | --- | --- | | $1020 |  | |
|  | $1029 |

**Question 7 (1 point)**

Which of the following Addressing Modes has no Effective Address?

Question 7 options:

|  |  |
| --- | --- |
|  | IDX |
|  | INH |
|  | EXT |
|  | REL |

**Question 8 (1 point)**

What is the most correct action to take should the following Error Message appear when assembling your code: "Error - Branch target out of range?"

Question 8 options:

|  |  |
| --- | --- |
|  | Call the Course Professor at 2:00 A.M. and ask for help |
|  | Use a Long Branch Instruction |
|  | Spend hours rewritinng the code to remove the Error Message |
|  | Use a different Short Branch Instruction |

**Question 9 (1 point)**

The Indexed (IDX) Addressing Mode uses a 5-bit signed offset that is added to the base index register (such as X or Y) to form the Effective Address of the memory location that will be affected by the instruction. The range of the 5-bit signed offset is which of the following values?

Question 9 options:

|  |  |
| --- | --- |
|  | 0 to 31 |
|  | -16 to 15 |
|  | -15 to 16 |
|  | -128 to 1271 |

**Question 10 (1 point)**

Which of the following correctly identifies the numeric range of short branch offeset values ?

Question 10 options:

|  |  |
| --- | --- |
|  | -127 to 128 |
|  | -32768 to 32767 |
|  | 0 to 255 |
|  | -128 to 127 |

**Question 11 (1 point)**

The instruction **ldaa 1,x+**

Question 11 options:

|  |  |
| --- | --- |
|  | loads A with the value pointed to by X and then increments X by 1 |
|  | |  |  | | --- | --- | | Loads X with the values pointed to by A and then increments the value of A by one |  | |
|  | loads A with the value of Memory Address ( X + 1 ) |
|  | loads A with one, then increments X |

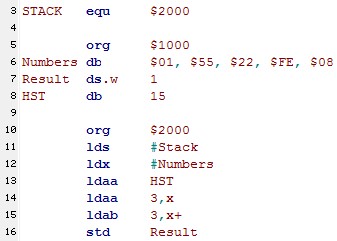
**Question 12 (1 point)**

When is a program's Test Plan created?

Question 12 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | After program delivery to the customer |  | |
|  | Never - no requirement. |
|  | Before any code is written |
|  | After the code is wriitten |

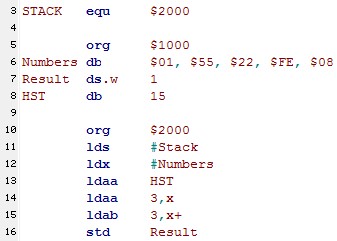
**Question 13 (1 point)**

What address does the value of HST occupy in the following code segment? (Note: **ds.w 1** reserves two memory bytes - e.g. a Word)  


Question 13 options:

|  |  |
| --- | --- |
|  | $1009 |
|  | $1008 |
|  | $1006 |
|  | $1007 |

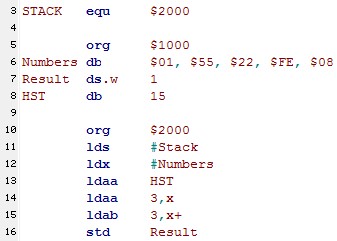
**Question 14 (1 point)**

What value is loaded into Register X after line 12 of the following code segment executes?  


Question 14 options:

|  |  |
| --- | --- |
|  | $0155 |
|  | $2000 |
|  | $1000 |
|  | $015522FE08 |

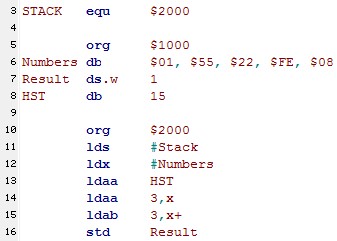
**Question 15 (1 point)**

What value is loaded into Register A after line 13 of the following code segment executes?  


Question 15 options:

|  |  |
| --- | --- |
|  | $0F |
|  | $15 |
|  | $115 |
|  | Address of HST |

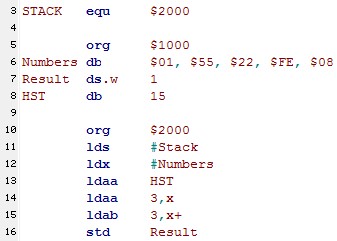
**Question 16 (1 point)**

What value is loaded into Register A after line 14 of the following code segment executes?  


Question 16 options:

|  |  |
| --- | --- |
|  | $01 |
|  | $55 |
|  | $FE |
|  | $08 |

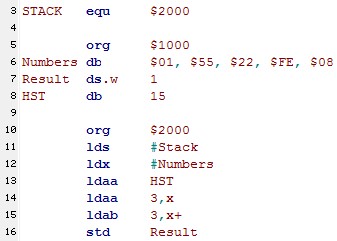
**Question 17 (1 point)**

What is the value of Register X after line 14 of the following code segment executes?  


Question 17 options:

|  |  |
| --- | --- |
|  | $1001 |
|  | $1003 |
|  | $1002 |
|  | $1000 |

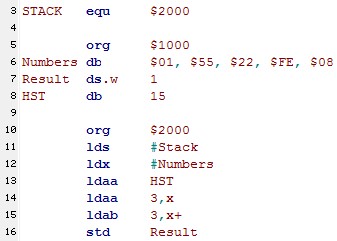
**Question 18 (1 point)**

What value is loaded into Register B after line 15 of the following code segment executes?  


Question 18 options:

|  |  |
| --- | --- |
|  | $FE |
|  | $55 |
|  | $01 |
|  | $22 |

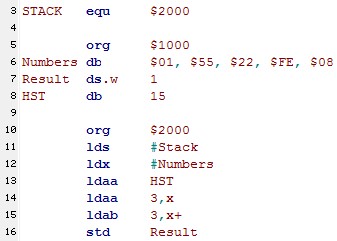
**Question 19 (1 point)**

What is the value of Register X after line 15 of the following code segment executes?  


Question 19 options:

|  |  |
| --- | --- |
|  | $1000 |
|  | $1002 |
|  | $1001 |
|  | $1003 |

**Question 20 (1 point)**

What value is stored at Result after line 16 of the following code segment executes?  


Question 20 options:

|  |  |
| --- | --- |
|  | $01FE |
|  | $FE01 |
|  | $5522 |
|  | $0155 |