

Q1-14 Answers: SampleExam1Questions_SelectedFromQuestionsActuallyWrittenInThePast

Question 1 6

Question 2 11
-4
-5
-3

Question 3 NR
1011
1100
1100

Question 4 1100 1010 1111 1110

Question 5 3A.A8

Question 6 $[-2^5, 2^5 - 1]$ or $[-32, 31]$

Question 7 $(((((1 * 2 + 0)2 + 0)2 + 1)2 + 1)2 + 0)2 + 1)2 + 0)2 + 1 = 309$

Question 8 $(((((1 * 2 + 0)2 + 0)2 + 1)2 + 1)2 + 0)2 + 1)2 + 0)2 + 1 = -203$

Question 9

```
10101001
11010110
(+ ) -----
01111111
```

overflow occurred: Y N]
sum of 2 negative values
cannot be positive

Question 10 1 10000010 100100100000000000000000 (in hex: C1490000)

address (in decimal)	Contents in hex (if <i>little endian</i>)	Contents in hex (if <i>big endian</i>)
1000	21	AB
1001	43	CD
1002	CD	43
1003	AB	21

Question 12 6th

Question 13 3 of the following (or something to the effect):

- CPU, memory and I/O devices (interconnected through bus) are basic components
- data and instructions both stored in memory
- single, sequentially addressed memory that's accessed by address regardless of what's stored
- instructions are executed sequentially unless explicitly altered

Question 14 In the instruction set, the only instructions that access memory are load and store instructions.