\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Family name Given name Student number

**ENS1161 Computer Fundamentals**

**Test 8**

(a) Find the 8-bit 2’s complement form for the number -98.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |

(b) (i) Add the 8-bit binary numbers1000 1100 and 1001 1001, and find the

values of the C, N and V flags.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **8-bit Output** | | | | | | | |
|  |  |  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **C** | **N** | **V** |
|  |  |  |

1. By interpreting the addition in terms of **unsigned** integers, convert the

answer to a decimal number

……………….………….

1. By interpreting the addition in terms of signed integers, convert the

answers to a decimal number.

………………………….

[ 2 + 4 + 2 + 2 = 10 marks ]