## TWo's Complement

| 0.1.0.1.0.1.1.   |                  |                  |
|------------------|------------------|------------------|
| 01010111         | 10010000         | 10011100         |
| -01000110        | -01001110        | -10111011        |
| 106010001        | 101000010        | 1110001          |
|                  |                  |                  |
| 10101001         | 10101010         | 10110011         |
|                  | 10101010         | 10110011         |
| -00101110        | <u>-11101100</u> | <u>-01011111</u> |
| 1011011          | 10111110         | 10010100         |
|                  |                  |                  |
| 01100100         | 01010010         | 10111000         |
| -11011001        | -10001111        | -01010110        |
| 10001011         | 11000011         | 01010110         |
|                  |                  |                  |
| 01001101         | 4.04.4           | e.w-             |
| 01001101         | 10111000         | 11100011         |
| <u>-00000100</u> | <u>-00100100</u> | -10110001        |
| 10,001001        | 110010100        | 100110010        |
|                  |                  |                  |
| 00111000         | 01001010         | 11011110         |
| -00110001        | -10010100        |                  |
| 100000111        | -10010110        | -00010101        |
|                  | 10               |                  |
|                  |                  |                  |
| 01011001         | 00101010         | 11111001         |
| -11101110        | -10110001        | -01000100        |
| 01101011         | 01111001         | 110100011        |
|                  |                  |                  |
| 00101001         | 11100001         | 01100110         |
|                  |                  | 01100110         |
| -11001100        | -10101000        | -01010110        |
|                  | 100111010        | 100010000        |

| 1) 0101   | 00110  | -01001110   | 3.) 10011100  | 4) 10101001  |
|-----------|--------|-------------|---------------|--------------|
| 1011      | X      |             |               |              |
| +         | 110011 |             |               |              |
|           |        | 10110001    | 01000100      | 11010001     |
| 1011      | 1      | + 1         | + 1           | + 1          |
|           | 1010   | 10110010    | 01000101      | 110010011    |
| 01010     |        | 10010000    | 10011100      | 10101001     |
| + 1011    | 1016   | t10110010   | +01000101     | 111010610    |
| 10001     | 3001   | 101000010   | 11160001      | 101111011    |
| 5) 101010 | 6      | 1100110011  | 7101100100    | 5) 01010010  |
| - 111011  | 00     | 01011111    | -11011001     | -1.0001111   |
| 00011     | DOIN   | 10100000    | . 00100110    | 01110000     |
| +         | 1      | +           | + 1           | + 1          |
| 00010     | 001    | 10100001    | 00100111      | 01110001     |
| 101010    | 010    | lonocii     | oiloeioo      | 01010010     |
| 100010    | 100    | 7 10100001  | + 00100111    | +01110001    |
| 10111     | 110    | 10101010    | 10000011      | 111000011    |
| 9) 10111  | 000    | 10/01001101 | 11) 10 111000 | 12) 11100011 |
| -0101     | 0110   | -00000100   | - 00,001,00   | -10110001    |
| 1010      | 1001   | 1,1,1,6,1   | 11011011      | 01001110     |
| t         | 1      | +           | + )           | + 1          |
| 1010      | 1010   | 1111100     | 1 1011100     | 0100111      |
| 10111     | 000    | 01001101    | 10111000      | 11100011     |
| + 1010    |        | +11111100   | +11011100     | +01001111    |
| 101101    | 1010   | 101001001   | 110010100     | 100110010    |

| 13/00111000   | 14) 01001010 | 15) 11011110 | 16)01011001 |
|---------------|--------------|--------------|-------------|
| 10001100      | -, 10010100  | - 00010101   | - 11101110  |
|               | 01101011     |              |             |
| 11001110      |              | 11101010     | 00010001    |
| † <u>'</u>    | 4            | + \          | t 1         |
| 1100111       | 01101100     | 1)101011     | 00010010    |
| 00111000      | 01001010     | 1101110      | 01011001    |
| +11001111     | 01101100     | 11101011     | +,00010010  |
| 100000,11     | 10110110     | 11001001     | 01101011    |
| 17) 0010 1010 | 18) 11111001 | 19) 00101001 | 20)11100001 |
| -10110001     | - 01010110   | -11001100    | - 1010100   |
|               |              | 1            |             |
| 01001110      | 10101001     | 00110011     | 01010111    |
| +             | + 1          | 1            | + 1         |
| 01001111      | 10101010     | 60110100     | 010,1000    |
| 00101010      | 11111001     | 0010100      | 11100061    |
| 01001111      | +10101010    | +0011010     |             |
| 01111061      | 11000011     | 0101110      |             |
|               |              |              |             |
| 21)01100116   |              |              |             |
| -01010110     |              |              |             |
| 10101001      |              |              |             |
| 1             |              |              |             |
| 10101010      |              |              |             |
|               |              |              |             |
| 01100110      |              |              |             |
| 710101010     |              |              |             |
| 1000,0000     |              |              |             |
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