Name: $\qquad$
Value: 2

Find the 1 's complement of each of the following binary numbers:

| $1011_{2}$ | $\# 1$ | $1010_{2}$ | $\# 2$ |
| :---: | :---: | :---: | :---: |
| $1100_{2}$ | $\# 3$ | $1000_{2}$ | $\# 4$ |
| $0000_{2}$ | $\# 5$ | $1111_{2}$ | $\# 6$ |

Find the 2 's complement of each of the following binary numbers:

| $1011_{2}$ | $\# 7$ | $1010_{2}$ | $\# 8$ |
| :---: | :---: | :---: | :---: |
| $1100_{2}$ | $\# 9$ | $1000_{2}$ | $\# 10$ |
| $0000_{2}$ | $\# 11$ | $1111_{2}$ | $\# 12$ |

Find the 15 's complement of each of the following hexadecimal numbers:

| $102 \mathrm{~A}_{\mathrm{x}}$ | $\# 13$ | $3 \mathrm{C} 98_{\mathrm{x}}$ | $\# 14$ |
| :---: | :---: | :---: | :---: |
| $4 \mathrm{~B} 7 \mathrm{~F}_{\mathrm{x}}$ | $\# 15$ | ED65 $_{\mathrm{x}}$ | $\# 16$ |
| $0000_{\mathrm{x}}$ | $\# 17$ | FFFF $_{x}$ | $\# 18$ |
| $8000_{\mathrm{x}}$ | $\# 19$ | $7 \mathrm{FFF}_{\mathrm{x}}$ | $\# 20$ |

Find the 16's complement of each of the following hexadecimal numbers:

| $102 \mathrm{~A}_{\mathrm{x}}$ | $\# 21$ | $3 \mathrm{C} 98_{\mathrm{x}}$ | $\# 22$ |
| :---: | :---: | :---: | :---: |
| $4 \mathrm{~B} 7 \mathrm{~F}_{\mathrm{x}}$ | $\# 23$ | ED65 $_{\mathrm{x}}$ | $\# 24$ |
| $0000_{\mathrm{x}}$ | $\# 25$ | FFFF $_{x}$ | $\# 26$ |
| $8000_{\mathrm{x}}$ | $\# 27$ | $7 \mathrm{FFF}_{\mathrm{x}}$ | $\# 28$ |


| The 10 's complement of $2305_{10}$ is | $\# 29$ |
| :--- | :---: |
| The 2's complement of $10110_{3}$ is | $\# 30$ |
| The 5's complement of $23410_{5}$ is | $\# 31$ |
| The 4's complement of $2301_{4}$ is | $\# 32$ |
| The 7's complement of $654000_{7}$ is | $\# 33$ |

