<table>
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<th>Problem</th>
<th>Description</th>
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</table>
| 1.      | **Computer Number Systems**  
Solve for $X_2$  
\[ X_2 = F_{123_{16}} - 123_{10} - 123_{8} \] |
| 2.      | **Bit String Flicking**  
Solve for $X$  
\[ X = (RCIRC - 2 \ 11000) \ XOR \ (LSHIFT\ -\ 1 \ 01100) \] |
| 3.      | **Bit String Flicking**  
How many values of $X$ satisfy the following equation?  
\[ (RCIRC - 3 (01010 \ OR \ 00101 \ AND \ X) = 11001 \] |
| 4.      | **Boolean Algebra**  
Simplify completely  
\[ ( \overline{AB \ C} \ ) \ ( \overline{A \ C} \ ) \] |
| 5.      | **Boolean Algebra**  
List all ordered triples $(A,B,C)$ that make the following expression TRUE  
\[ AB \oplus \overline{C} + (CB + A) \] |