	Senior Division Short Problems	
1.	Computer Number Systems	
	Solve for X ₂	
	$X_2 = F123_{16} - 123_{10} - 123_8$	
2.	Bit String Flicking	
	Solve for X	
	X= (RCIRC – 2 11000) XOR (LSHIFT- 1 01100)	
3. 1	Bit String Flicking	
	How many values of X satisfy the following equation?	
	(RCIRC – 3 (01010 OR 00101 AND X) = 11001	
4. 1	Boolean Algebra	
	Simplify completely	
	$(\overline{AB}C)(\overline{A}C)$	
5. 1	Boolean Algebra	
	List all ordered triples (A,B,C) that make the following expression TRUE	
	$AB \oplus \overline{C + (CB + A)}$	
4. 1	How many values of X satisfy the following equation? (RCIRC – 3 (01010 OR 00101 AND X) = 11001 Boolean Algebra Simplify completely ($\overline{AB}C$)($\overline{A}C$) Boolean Algebra List all ordered triples (A,B,C) that make the following expression TRUE	