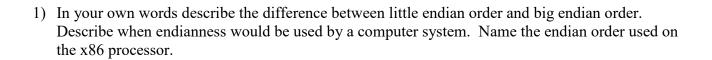
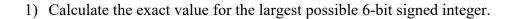
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CIS2420 – Exam 1	- Part 2 of 2	(F)
Bradley Sward		





2) Create a truth table to show all possible inputs and outputs for the Boolean function A A ¬B Create a truth table to show all possible inputs and outputs for the Boolean function ¬ (¬A V B) Describe the results of the two truth tables. Who derived the theorem describing what you see?

A B

DECIMAL	HEXADECIMAL	BINARY	MULTIPLY	1	16	256
0	0	0000	0	0	0	0
1	1	0001	1	1	16	256
2	2	0010	2	2	32	512
3	3	0011	3	3	48	768
4	4	0100	4	4	64	1024
5	5	0101	5	5	80	1280
6	6	0110	6	6	96	1536
7	7	0111	7	7	112	1792
8	8	1000	8	8	128	2048
9	9	1001	9	9	144	2304
10	Α	1010	10	10	160	2560
11	В	1011	11	11	176	2816
12	С	1100	12	12	192	3072
13	D	1101	13	13	208	3328
14	E	1110	14	14	224	3584
15	F	1111	15	15	240	3840

12	С	1100		12	12	192	3
13	D	1101		13	13	208	3
14	Е	1110		14	14	224	3
15	F	1111		15	15	240	3
	e both the <u>sign</u> 11111 ₂	unsig		<u>mal</u> represe -	ntations for the	is binary integ	ger
4) Calculat	e the <u>minimur</u> 10010	n number of b	oits neede	ed to represe	ent each <u>unsig</u> 6000 	_	nteger
5) Calculat	e the <u>unsigned</u> 8116	l decimal repi –	resentatio	on of each h	exadecimal int 17E1		
6) Calculat	e the <u>signed 8-</u> -8110	-bit hexadeci	<u>mal</u> repre -1051		f each decimal -1		

7)	Calcu	late t	he	pure	<u>binar</u>	<u>v</u> represe	ntation o	of eacl	n fract	ional	deci	mal	numb	er			
		6 +	- ((7/8)	OR	(6.875	510)		5 +	(1/	2)	OR	(5.5	5010)	_		
8)	How 1	nany	/ bi	ts woı	ıld be	needed to	o repres	ent the	e decii	nal nı	umb	er 1.'	70 in 1	oinary	y?		
9)						ace after t	he decir	mal po	oint, bo	est ap	prox	imat	e the	decim	nal nu	mber 1	.70
10	\ T		C DI		a	4	•	4		æ			•,	er.	TI	1 . 0	
10	descri	be th	ne p	urpos	e of e	gs that are ach of you	ur listed	l flags.	,							_	
	3)																
11						. Variabl anguage _l					or D		RD) de		l in th	e data UNS I	GNEI

UNSIGNED