

Math 135 (Summer 2006)  
Warm-up Exercises for July 20, 2006

Let  $a = 1011010$  and let  $b = 101$  be two binary numbers.

(a) Compute  $a + b$ ,  $a \cdot b$ ,  $a - b$ , and  $a \div b$ .

(b) Determine the decimal representations of  $a$  and  $b$ .

Recall that the numerical equivalents of the letters are as follows:

A	B	C	D	E	F	G	H	I	J	K	L	M
0	1	2	3	4	5	6	7	8	9	10	11	12
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N	O	P	Q	R	S	T	U	V	W	X	Y	Z
13	14	15	16	17	18	19	20	21	22	23	24	25

(c) Suppose that EZRA and BARD are two base twenty-six numbers. Determine  $EZRA + BARD$  (in base twenty-six).