

## Number Systems test

Part A

Q1  $365_{10}$  to base 2

	count	RT	Rem	Binary
$2^8 = 256$	1	256	109	100000000
$2^7 = 128$	0	256	109	100000000
$2^6 = 64$	1	320	45	101000000
$2^5 = 32$	1	352	13	101100000
$2^4 = 16$	0	352	13	101100000
$2^3 = 8$	1	360	5	101101000
$2^2 = 4$	1	364	1	101101100
$2^1 = 2$	0	364	1	101101100
$2^0 = 1$	1	365	0	101101101

Answer is  $= 101101101_2$