

FORM 4 COMPUTER STUDIES**Chapter 4: Number Codes and Simple Binary Arithmetic**

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4.1 REPRESENTATION OF NUMERIC INFORMATION

	DENARY	BINARY	OCTAL	HEXADECIMAL
Base	10	2	8	16
Digits				
Place values				
Largest number given 5 digits				

4.2 CONVERSION FROM ONE SYSTEM INTO ANOTHER**4.2.1 Binary / Octal / Hexadecimal Systems → Denary**

Number	Step	Value in denary
11011_2		
123_8		
123_{16}		
$30BA_{16}$		

4.2.2 Denary → Binary / Octal / Hexadecimal Systems


e.g. Convert the following denary numbers into the systems specified:

(a) 21_{10} to binary(b) 291_{10} to octal

(c) 1963_{10} to hexadecimal**4.2.3 Octal Denary \Leftrightarrow Binary \Leftrightarrow Hexadecimal**

e.g. Write the octal and hexadecimal representation of the 16-bit word according to the groupings given by the brackets.

1 0 1 1 1 0 1 1 1 0 0 0 1 1 1 1



Octal :



Hexadecimal:

END OF CHAPTER 4