Automatismes – Séance 5

Lycée Les 3 Sources ; NSI 1re

Question 1

Déterminer la valeur en base 10 des nombres suivants.

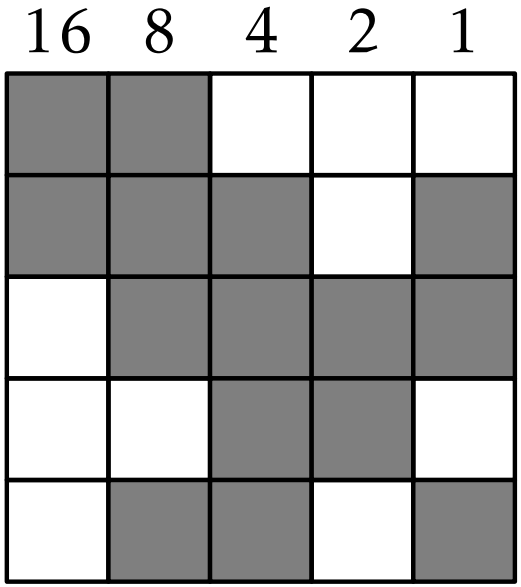
1) 100010_2
2) 1330_4
3) 57_{16}

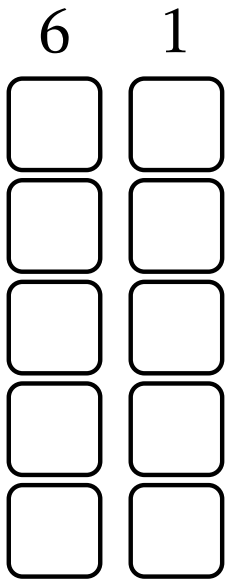
Question 2

Convertir 135 en base 2, 4 et 16 :

Question 3

Convertir l'image en dés :

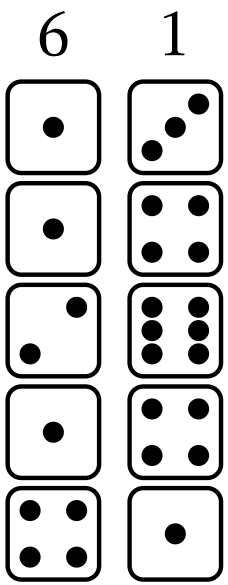


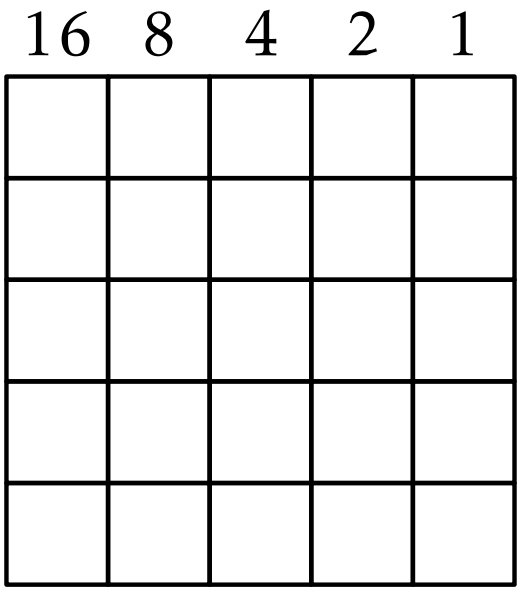




Question 4

Convertir les dés en image :





Correction

Question 1

Déterminer la valeur en base 10 des nombres suivants.

1) 100010_2
2) 1330_4
3) 57_{16}

Question 1

Déterminer la valeur en base 10 des nombres suivants.

1) $100010_2 = 34$
2) $1330_4 = 124$
3) $57_{16} = 171$

Question 2

Convertir 135 en base 2, 4 et 16 :

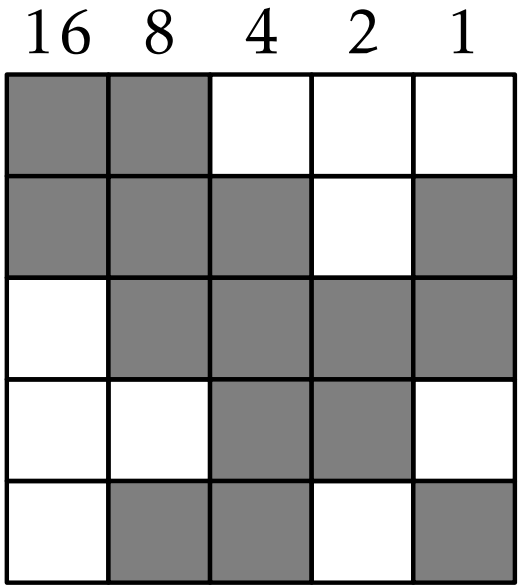
Question 2

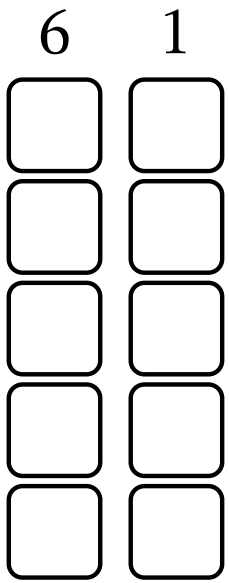
Convertir 135 en base 2, 4 et 16 :

$$135 = 10000111_2 = 2013_4 = 87_{16}$$

Question 3

Convertir l'image en dés :







Question 3

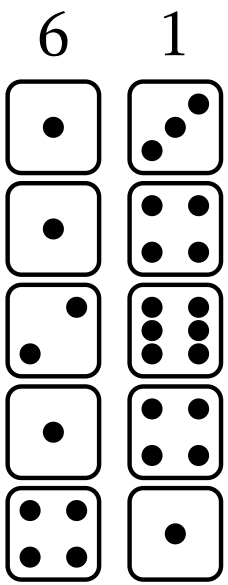
Convertir l'image en dés :

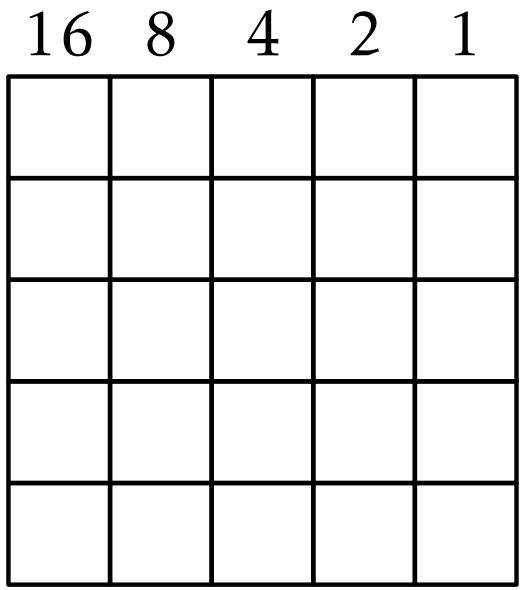
16	8	4	2	1						
16	8				=	24	=	$4\times6+0$	=	6 1
16	8	4		1	=	29	=	$4\times6+5$	=	
	8	4	2	1	=	15	=	$2\times6+3$	=	
		4	2		=	6	=	$1\times6+0$	=	
	8	4		1	=	13	=	$2\times6+1$	=	



Question 4

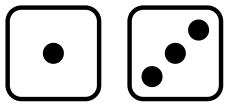
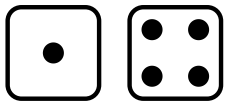
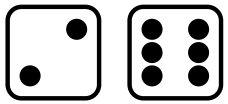
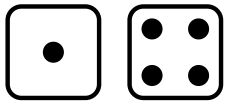
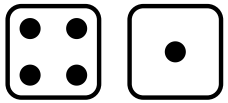
Convertir les dés en image :





Question 4

Convertir les dés en image :

6	1					16	8	4	2	1
		$= 1 \times 6 + 3$	$= 9$	$=$			8			1
		$= 1 \times 6 + 4$	$= 10$	$=$			8		2	
		$= 2 \times 6 + 0$	$= 12$	$=$			8	4		
		$= 1 \times 6 + 4$	$= 10$	$=$			8		2	
		$= 4 \times 6 + 1$	$= 25$	$=$		16	8			1