Probem 12.1 13 76 39 S2 (1 1 1 1 1) C (0 12 4 2 6) (0 1 3 4 10)-12 12·3 = [10]13 -> (1 0 M 10 4) -> (0 12 4 2 6) (0 1 3 4 10) 12.4 _ 49 $= (9)_{13}$ -> (101104\ 00763\ 013410)

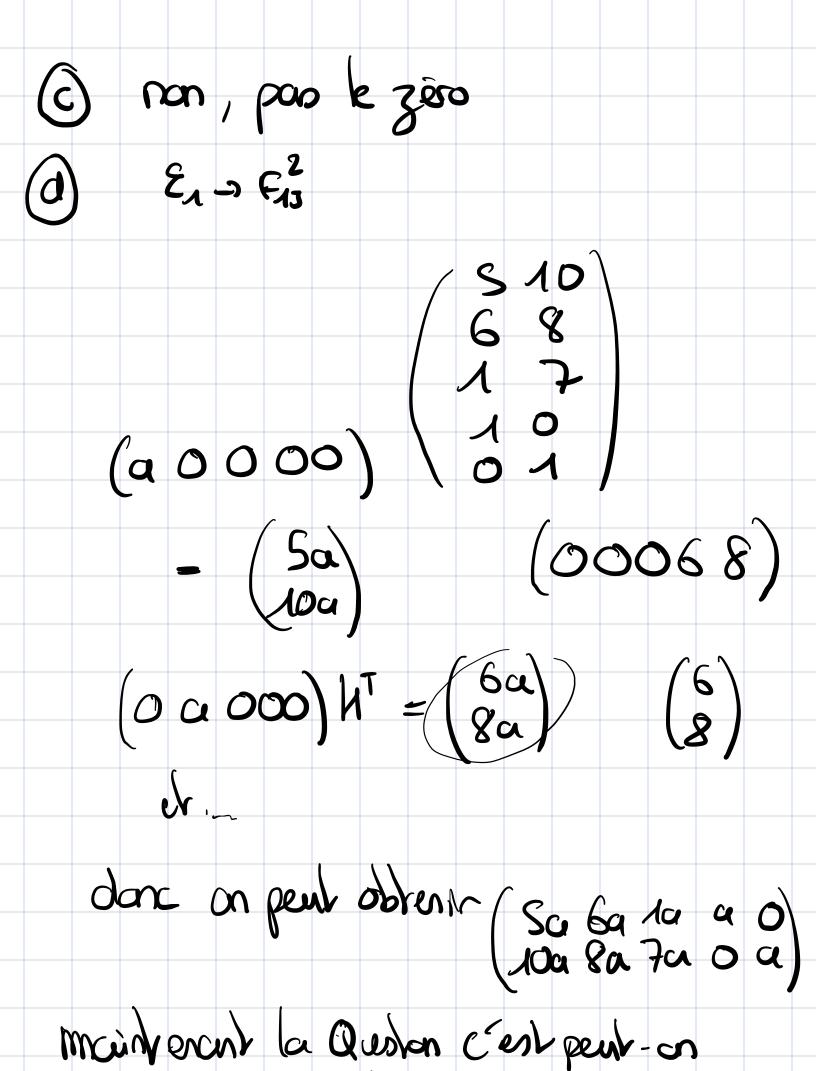
$$= \begin{pmatrix} 8.5 - 6 - 2 - 1 \\ 8.5 - 6 - 2 - 1 \end{pmatrix}$$

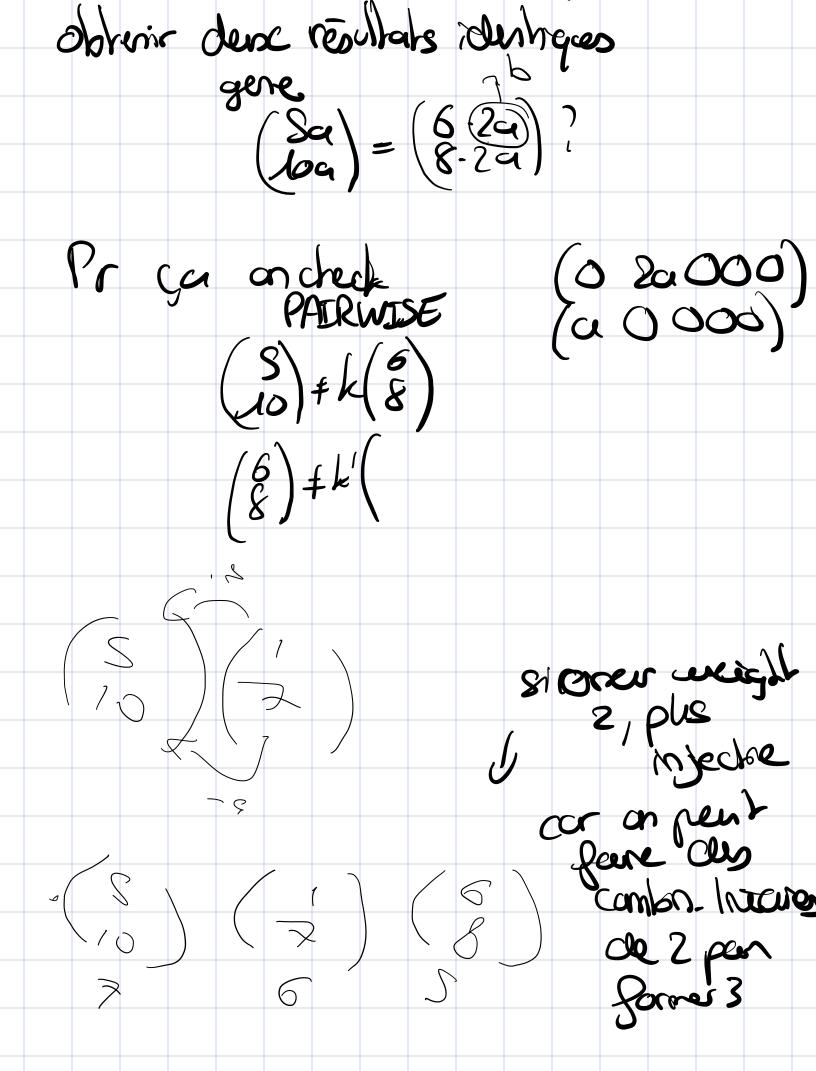
$$= \begin{pmatrix} 8-10 - 8 - 2 - 7 + 10 \end{pmatrix}$$

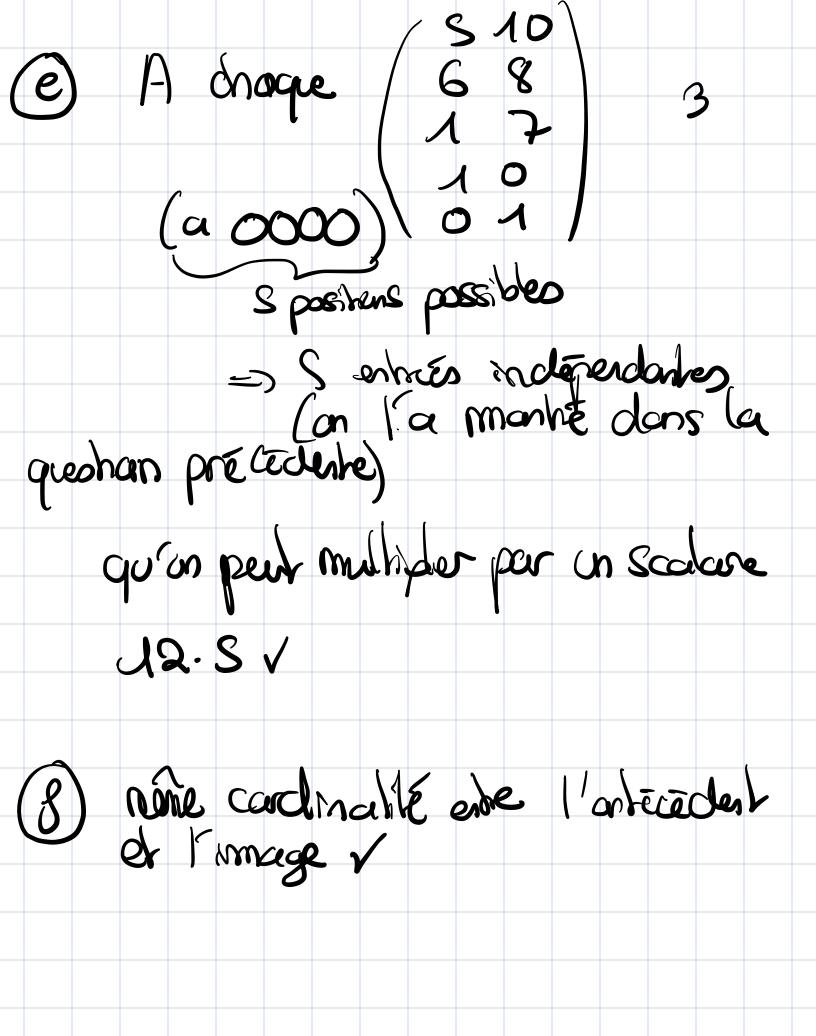
$$= \left(-3.8 - 8 - 4 \right)$$

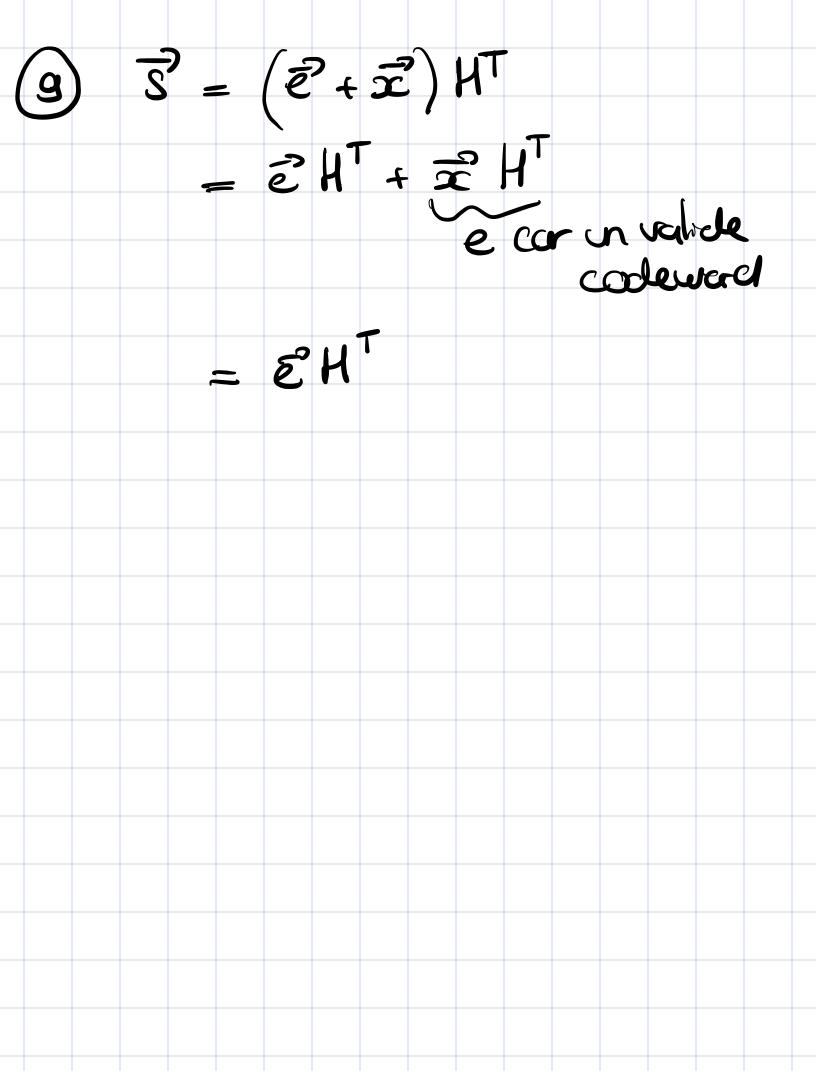
$$= \left(\begin{array}{c} S \\ -24 - 12 \\ \end{array} \right) = -36 = 3$$

(c)
$$y_3$$
 (c) y_3 (d) y_4 (e) y_5 (e) y_5 (f) y_5 (f)









(a)
$$3 = (6)$$

$$3H = 3$$

$$H3T = 310$$

$$68$$

$$1 7$$

$$10$$

$$0 1$$

(a) 6

$$4$$

$$100$$

$$4$$

$$5$$

$$6$$

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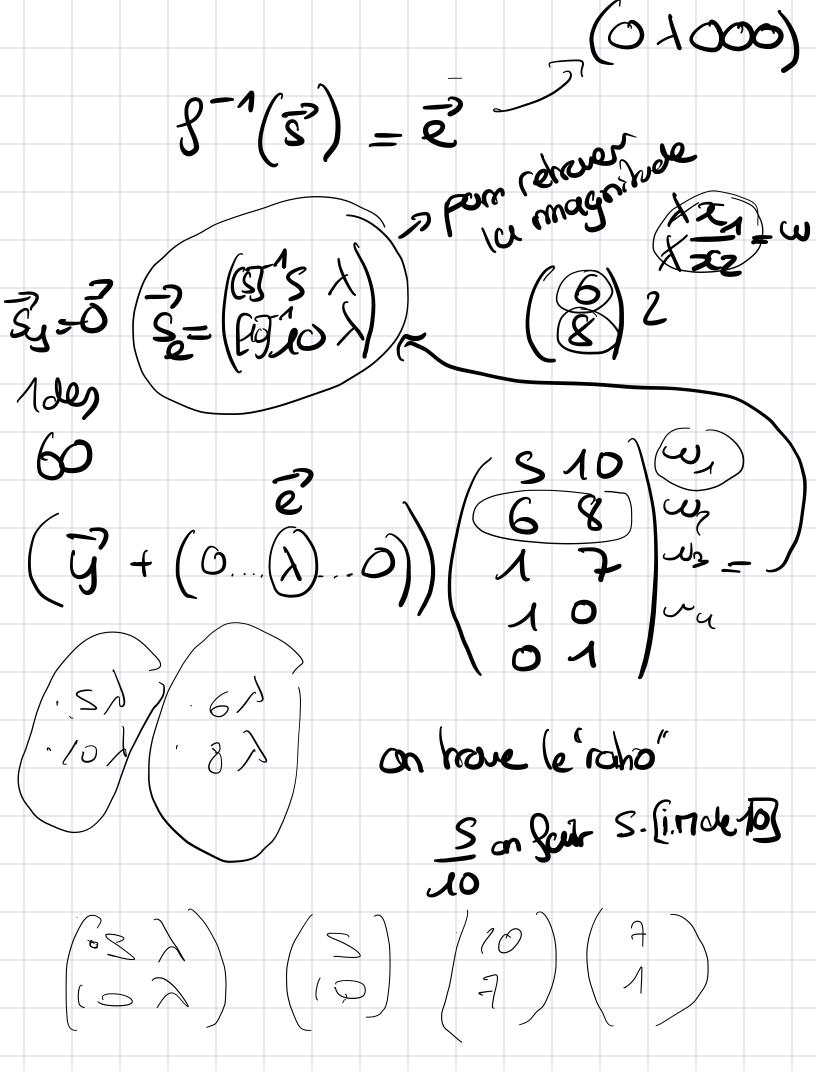
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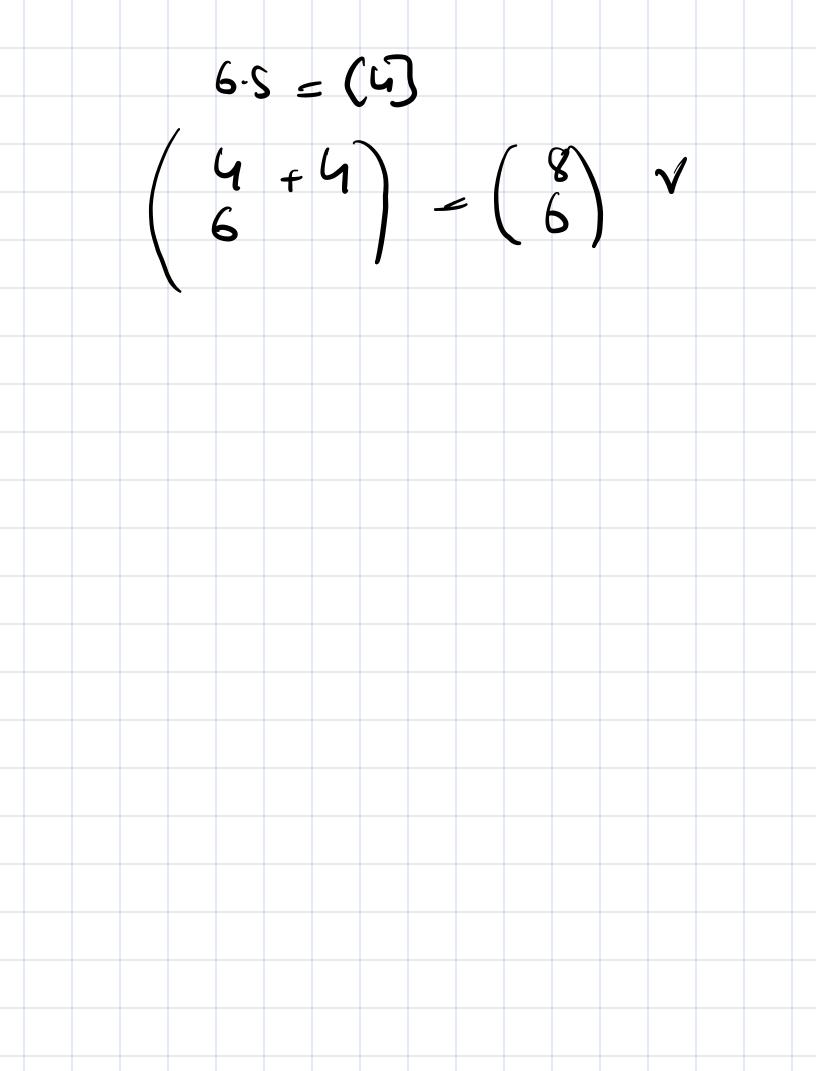
$$100$$

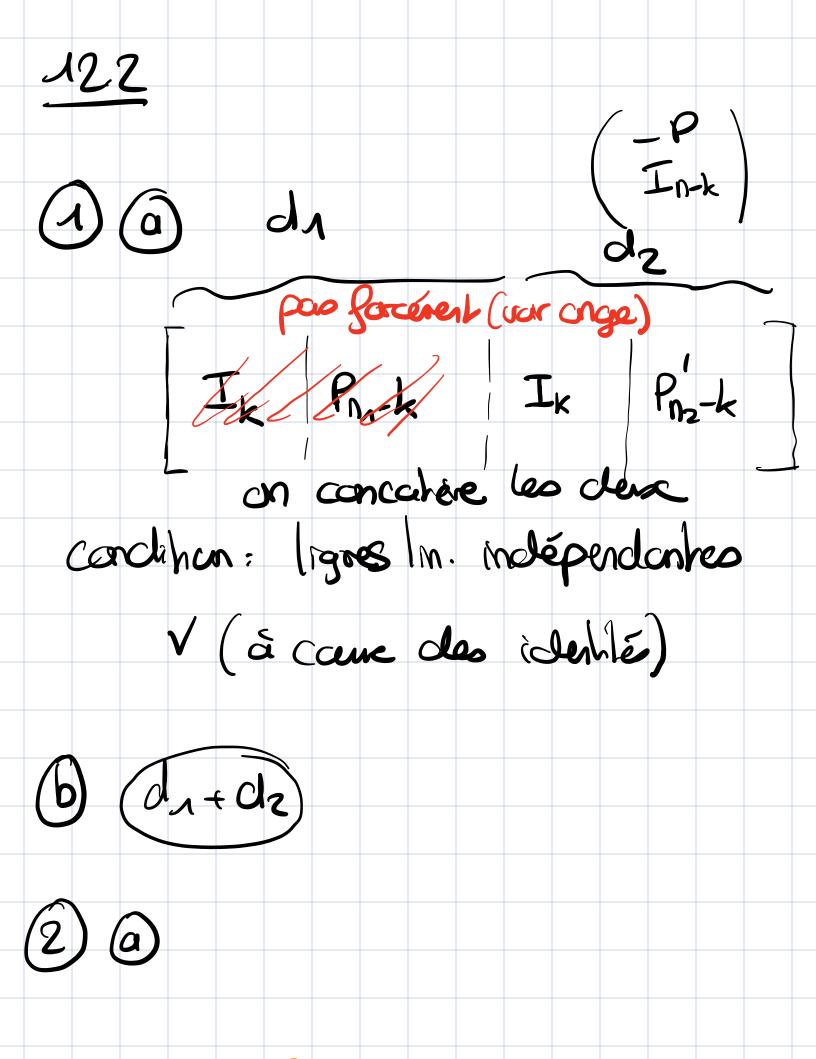
$$100$$

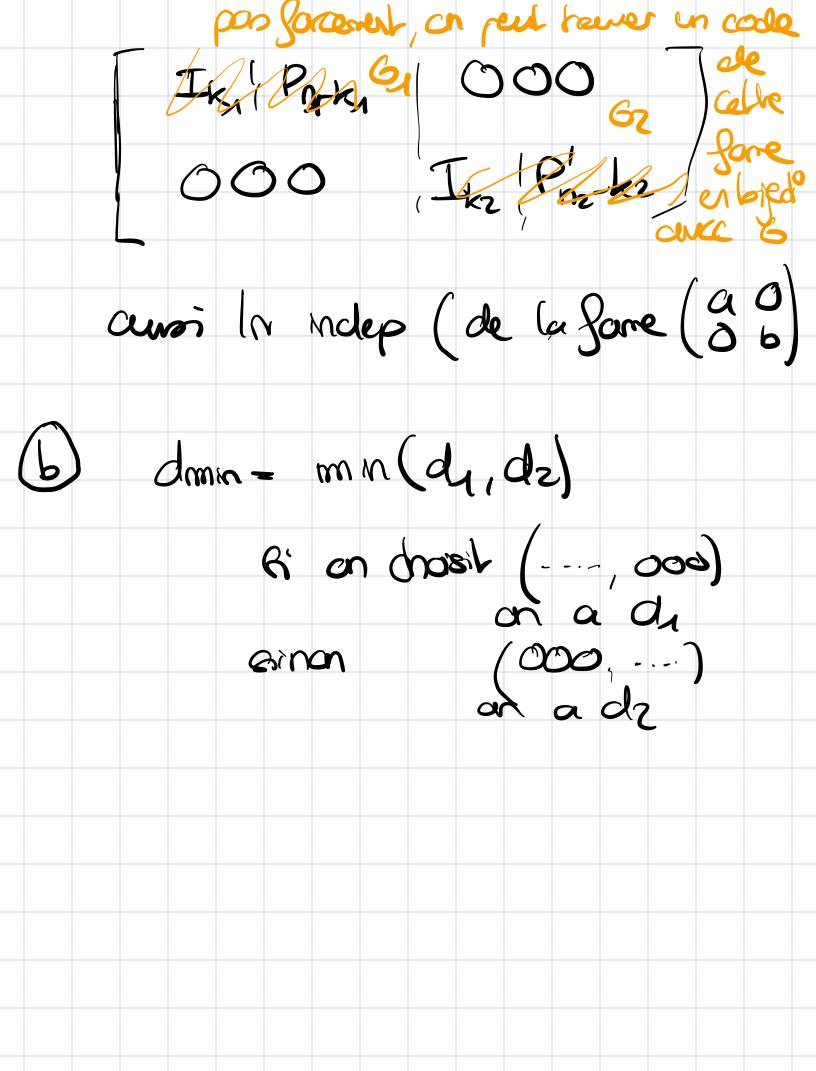
$$10$$



$$\begin{pmatrix} G \\ S \end{pmatrix} \begin{pmatrix} 12 \\ 3 \end{pmatrix}, \begin{pmatrix} S \\ 11 \end{pmatrix} \begin{pmatrix} S \\ 5 \end{pmatrix} \begin{pmatrix} 17 \\ 17 \end{pmatrix} \begin{pmatrix} 17 \\ 17$$







Prollem 12.3 1) Si ce rédect pos le con, dors deux codes auxuent la nême enseur hm inclep n-k indep (dmin -1) & n-k Supposens qu'in subset ce buile ce d'alle de de de la la dep

a Za 6 2a (ca) (20 2p) ca + 0/2a cb + 2bd c = -2dmance generance dent les types sent moles don PT col dmn-16n-k

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			8	'	20) ()	رعال) (cliff		nd.	CL	~ ()		7/
												am	and the second	1,	

$$\begin{pmatrix}
100 & 10 & 1 \\
010 & 11 & 1 \\
004 & 01 & 1
\end{pmatrix} = 6$$

$$d_{min} = 3$$
 $(1 20010)$

$$x_{1}=1$$

$$x_{2}=0$$

$$x_{3}=? 0$$

$$x_{4}=1$$

$$x_{5}=1=x_{2}+x_{3}\Rightarrow x_{3}=1$$

$$x_{6}=1$$

$$x_{6}=1$$

$$x_{7}=1$$

$$x$$

$$\begin{array}{c} c_{1} = 1 \\ c_{2} = 0 \\ c_{3} = 1 \end{array}$$

$$\begin{array}{c} c_{4} = 1 = x_{1} + x_{2} \\ c_{5} = 1 = x_{2} + x_{3} \\ c_{6} = 0 = x_{1} + x_{2} + x_{3} \end{array}$$

$$\begin{array}{c} (101001) \left(H^{T} \right) = (111) \\ 3 \times 1 + x_{2} + x_{3} \\ \Rightarrow x_{2} \times 1 + x_{3} \end{array}$$

$$\begin{array}{c} (101001) \left(H^{T} \right) = (111) \\ 3 \times 1 + x_{3} + x_{3} \\ \Rightarrow x_{2} \times 1 + x_{3} \end{array}$$

$$\begin{array}{c} (10111) \left(H^{T} \right) = (111) \\ 3 \times 1 + x_{3} + x_{3} + x_{3} \\ \Rightarrow x_{4} \times 1 + x_{3} + x_{3} \end{array}$$

