

EELU_BNS

Numbering systems

1. Convert decimal to binary: 1.1.(12) ₁₀ 1.2.(20) ₁₀ 1.3.(28) ₁₀ 1.4.(64) ₁₀ 1.5.(102) ₁₀	2. Convert binary to decimal: 2.1.(00011010) ₂ 2.2.(01010101) ₂ 2.3.(01001111) ₂ 2.4.(01100000) ₂ 2.5.(01111111) ₂
3. Perform the following ADD operations with detailed steps: 3.1.(00000011) ₂ + (00000001) ₂ 3.2.(00011001) ₂ + (00101101) ₂ 3.3.(00011111) ₂ + (00011111) ₂ 3.4.(00001111) ₂ + (00001110) ₂ 3.5.(00010111) ₂ + (00110101) ₂	4. Perform the following OR operations with detailed steps: 4.1.(00000011) ₂ (00000001) ₂ 4.2.(00011001) ₂ (00101101) ₂ 4.3.(00011111) ₂ (00011111) ₂ 4.4.(00001111) ₂ (00001110) ₂ 4.5.(00010111) ₂ (00110101) ₂
5. Perform the following AND operations with detailed steps: 5.1.(00000011) ₂ & (00000001) ₂ 5.2.(00011001) ₂ & (00101101) ₂ 5.3.(00011111) ₂ & (00011111) ₂ 5.4.(00001111) ₂ & (00001110) ₂ 5.5.(00010111) ₂ & (00110101) ₂	6. Perform the following XOR operations with detailed steps: 6.1.(00000011) ₂ & (00000001) ₂ 6.2.(00011001) ₂ & (00101101) ₂ 6.3.(00011111) ₂ & (00011111) ₂ 6.4.(00001111) ₂ & (00001110) ₂ 6.5.(00010111) ₂ & (00110101) ₂

جميع الحقوق محفوظة للجروب

[HTTPS://T.ME/JOINCHAT/FLECRWVLQ7VPRNLB](https://t.me/joinchat/flecrwvlq7vprnlb)

EELU_BNS

Chapter 10 – Introduction to Numerical Systems
Q3] Convert from Binary System to Hexa Decimal System

$(100101111)_2$

(100)	(101)	(111)
$\frac{421}{4}$	$\frac{521}{5}$	$\frac{721}{7}$

Oct $\Rightarrow (457)_8$
Hex $\Rightarrow (12F)_{16}$

$(1111010000011)_2$

(11110)	(10000)	(0011)
$\frac{8421}{14}$	$\frac{8421}{8}$	$\frac{8421}{3}$

$(E83)_{16}$

$(111001111001)_2$

(11110)	(01111)	(1001)
$\frac{8421}{14}$	$\frac{8421}{7}$	$\frac{8421}{9}$

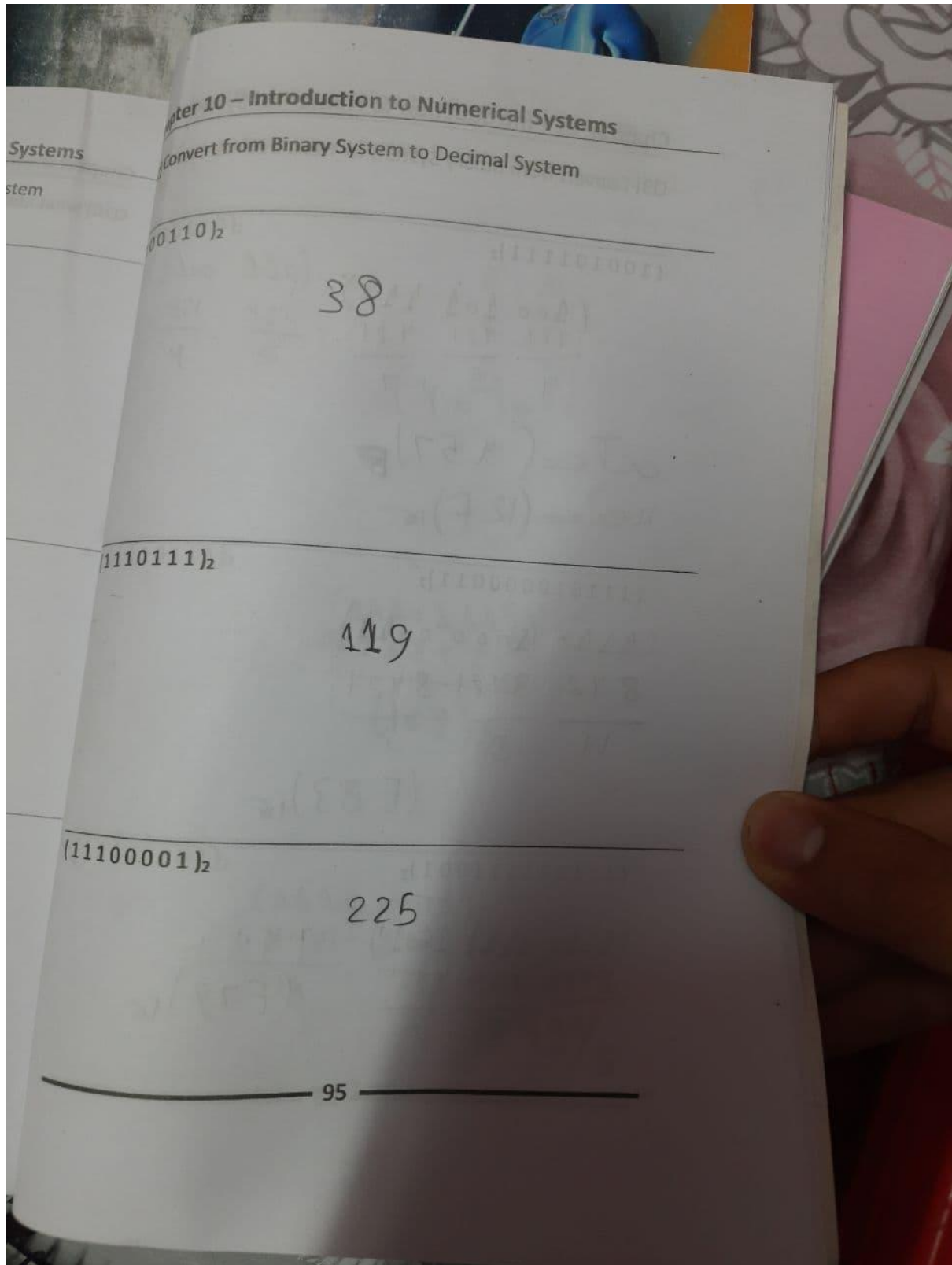
$(E79)_{16}$

96

جميع الحقوق محفوظة للجروب

<https://t.me/joinchat/flecrwvlq7vprnlb>

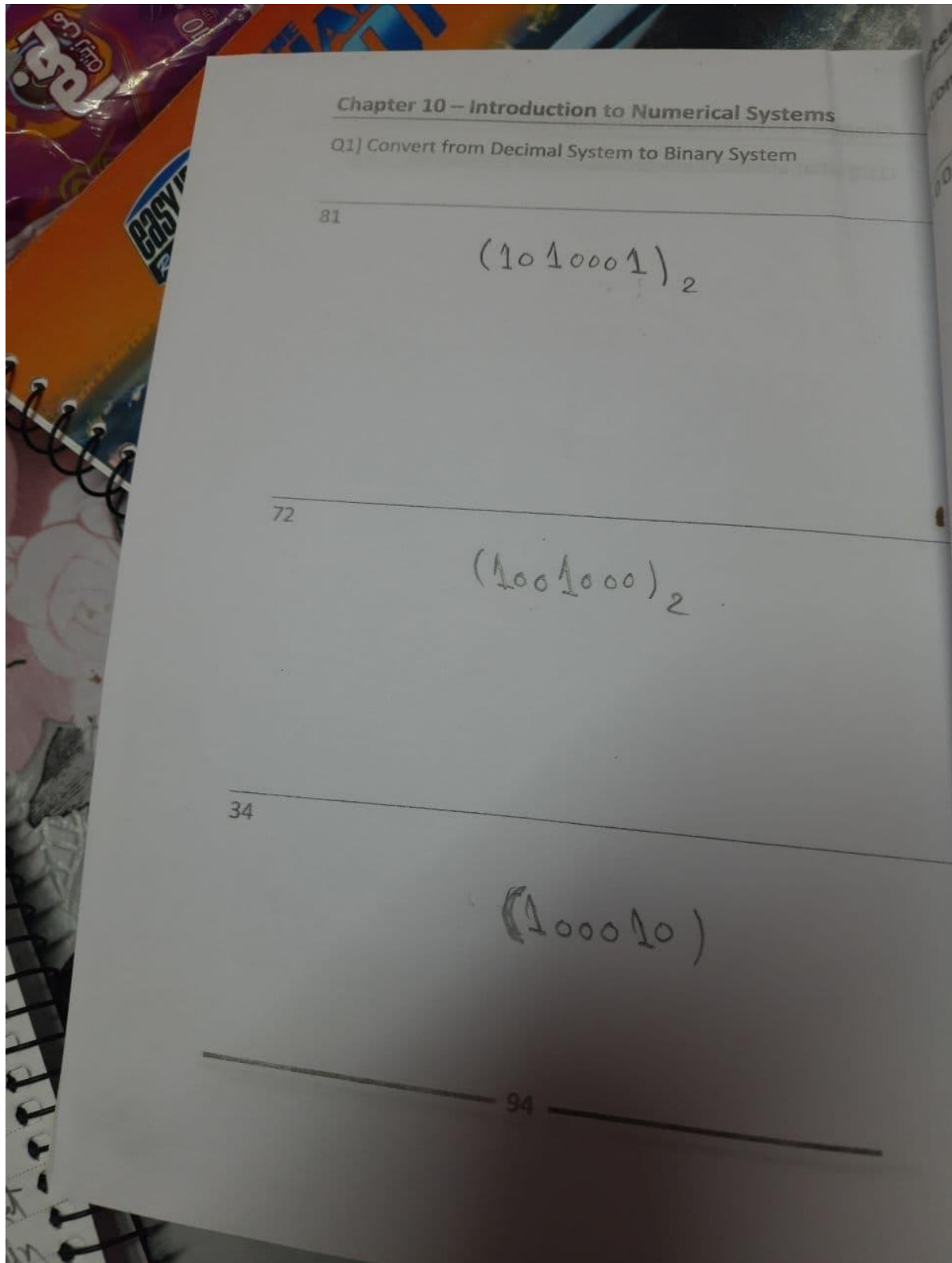
EELU_BNS



جميع الحقوق محفوظة للجروب

[HTTPS://T.ME/JOINCHAT/FLECRWVLQ7VPRNLB](https://t.me/joinchat/flecrwvlq7vprnlb)

EELU_BNS



جميع الحقوق محفوظة للجروب

[HTTPS://T.ME/JOINCHAT/FLECRWVLQ7VPRNLB](https://t.me/joinchat/flecrwvlq7vprnlb)

EELU_BNS

Chapter 10 – Introduction to Numerical Systems

Q7] Convert from Hexa Decimal System to Binary System

$(A0B1)_{16}$

$(1010000010110001)_2$

$(FCD0B1)_{16}$

$(111111001101000010110001)_2$

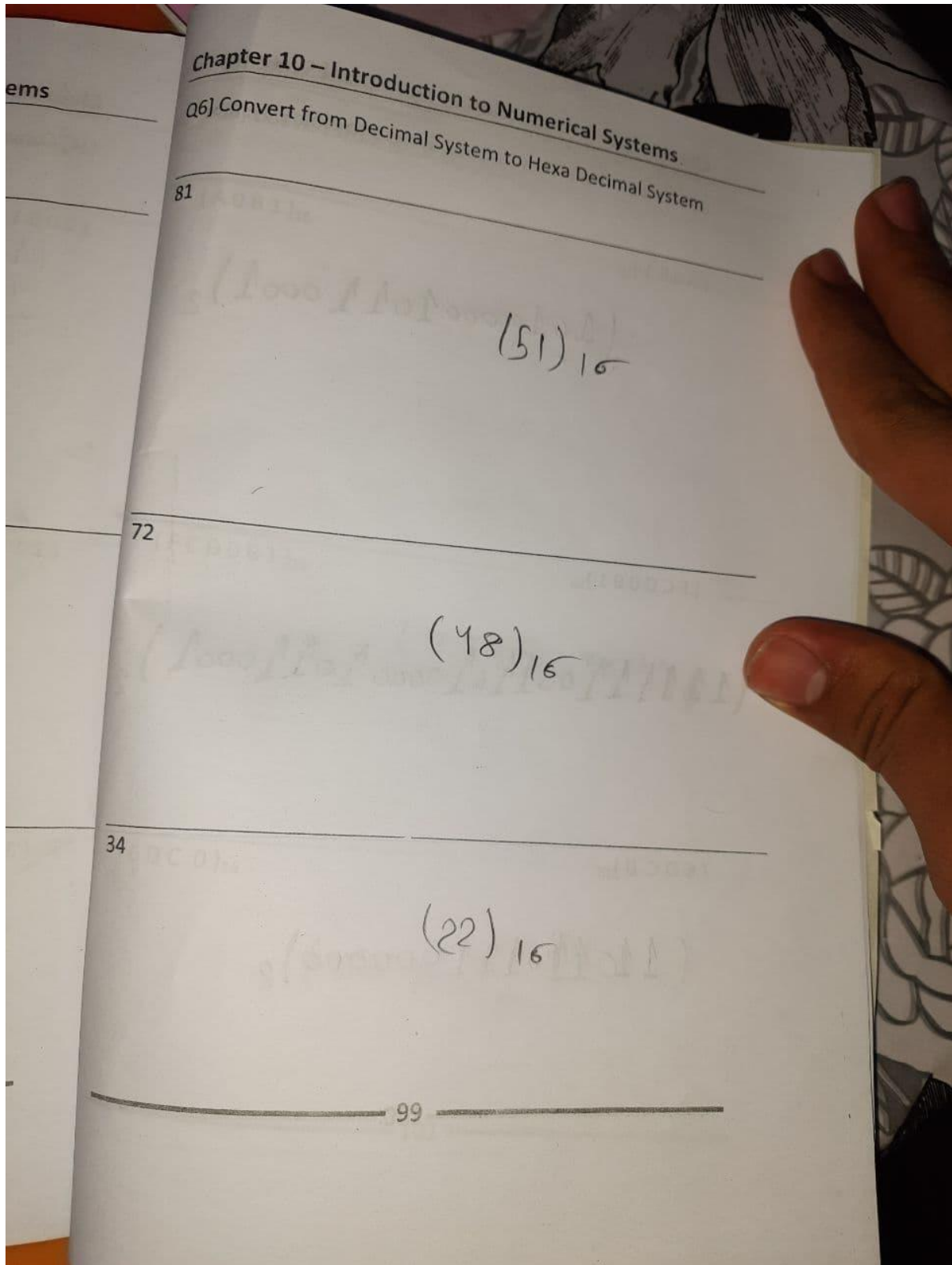
$(6DC0)_{16}$

$(110110111000000)_2$

جميع الحقوق محفوظة للجروب

<https://t.me/joinchat/flecrwvlq7vprnlb>

EELU_BNS



جميع الحقوق محفوظة للجروب

[HTTPS://T.ME/JOINCHAT/FLECRWVLQ7VPRNLB](https://t.me/joinchat/flecrwvlq7vprnlb)

EELU_BNS

Chapter 10 – Introduction to Numerical Systems

Q5] Convert from Decimal System to Octa System

81

$$\begin{array}{r|rr} 8 & 81 & 1 \\ 8 & 10 & 2 \\ 8 & 1 & 1 \\ & 0 & \end{array} \quad (121)_8$$

72

$$\begin{array}{r|rr} 8 & 72 & 0 \\ 8 & 9 & 1 \\ 8 & 1 & 1 \\ & 0 & \end{array} \quad (110)_8$$

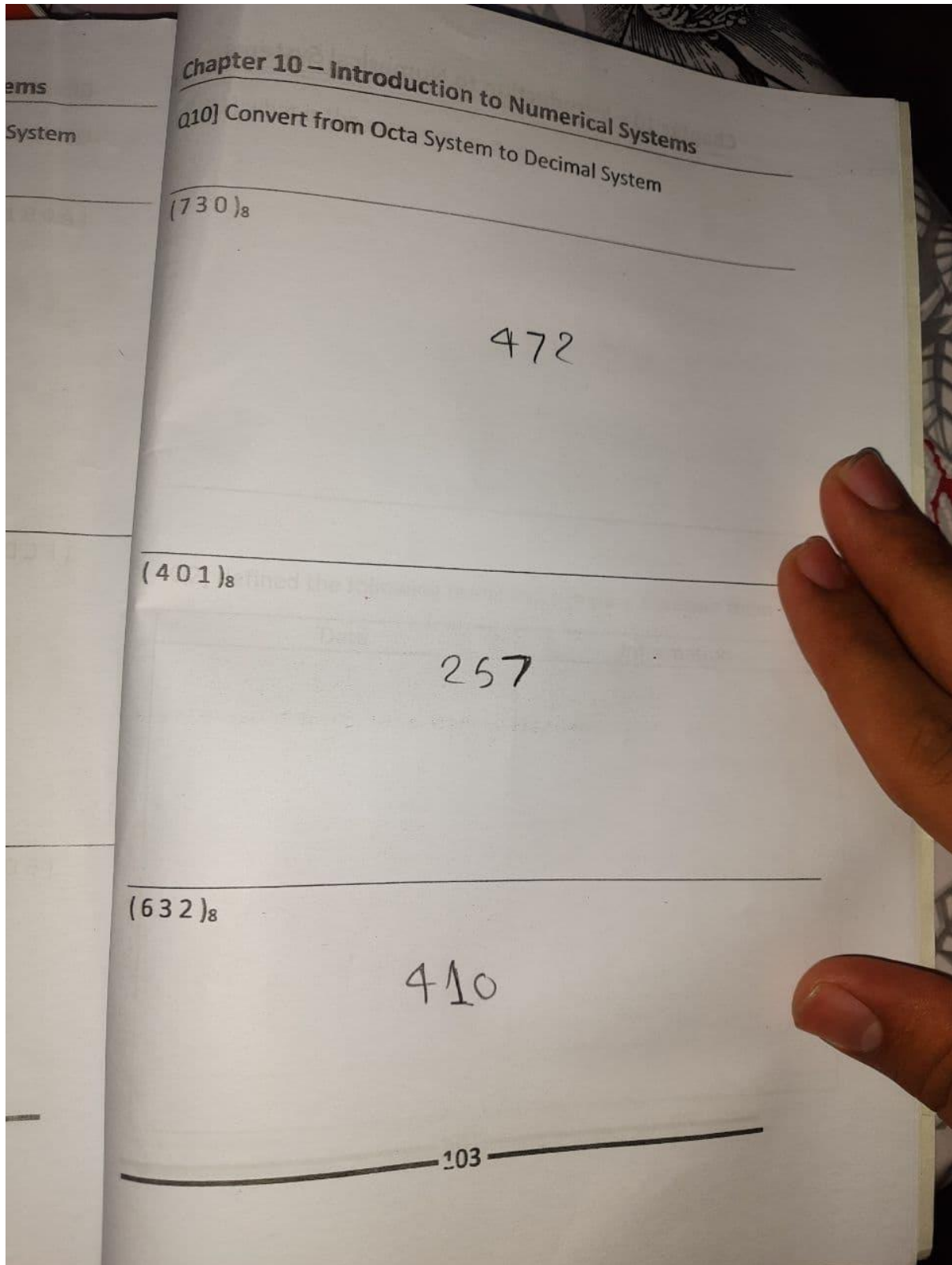
34

$$\begin{array}{r|rr} 8 & 34 & 2 \\ 8 & 4 & 2 \\ & 0 & \end{array} \quad (42)_8$$

جميع الحقوق محفوظة للجروب

<https://t.me/joinchat/flecrwvlq7vprnlb>

EELU_BNS



جميع الحقوق محفوظة للجروب

[HTTPS://T.ME/JOINCHAT/FLECRWVLQ7VPRNLB](https://t.me/joinchat/flecrwvlq7vprnlb)

EELU_BNS

Chapter 10 – Introduction to Numerical Systems

Q9] Convert from Hexa Decimal System to Decimal System

$(A01)_{16}$

2561

$(FB1)_{16}$

4017

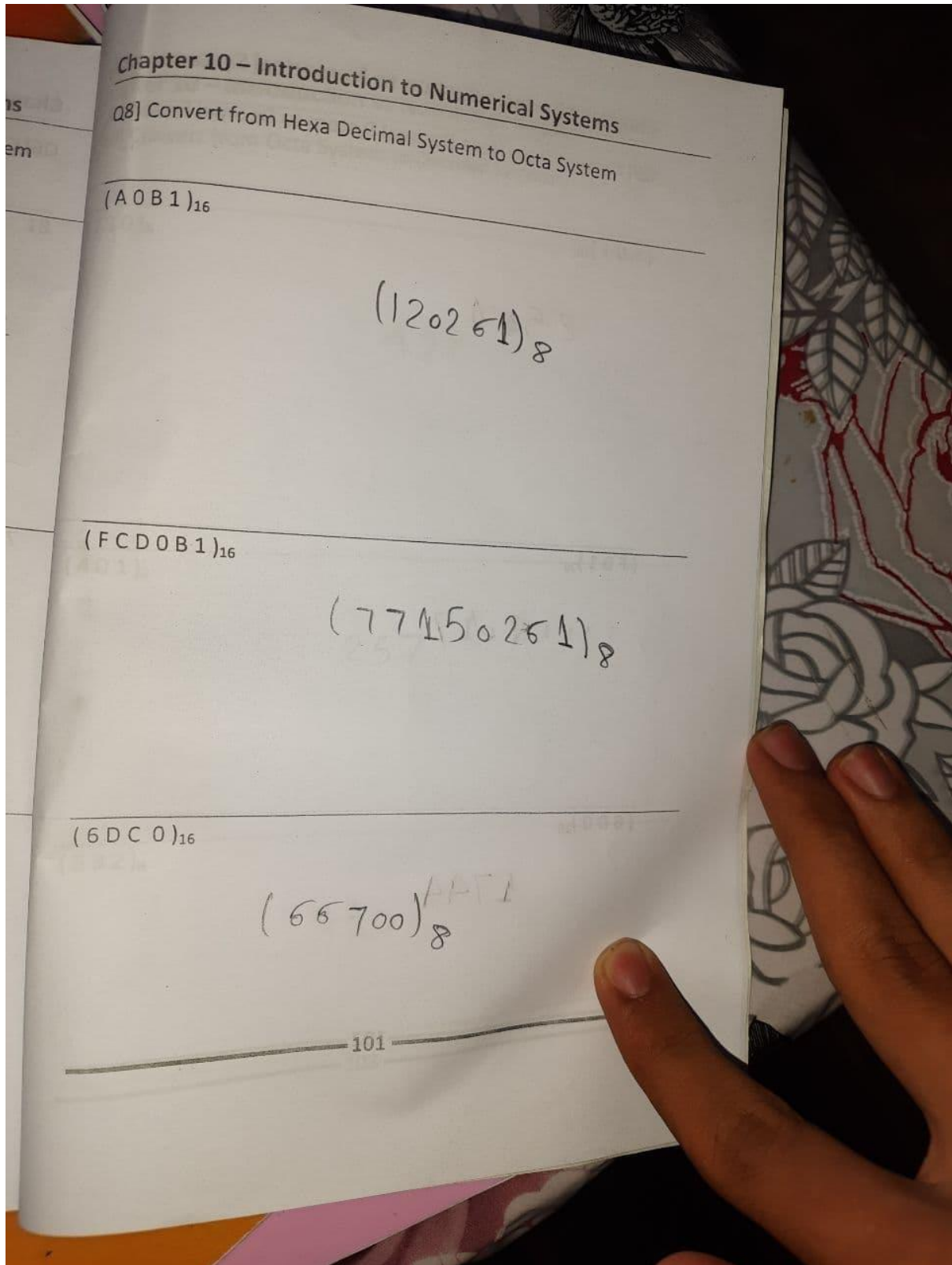
$(6D0)_{16}$

1744

جميع الحقوق محفوظة للجروب

[HTTPS://T.ME/JOINCHAT/FLECRWVLQ7VPRNLB](https://t.me/joinchat/flecrwvlq7vprnlb)

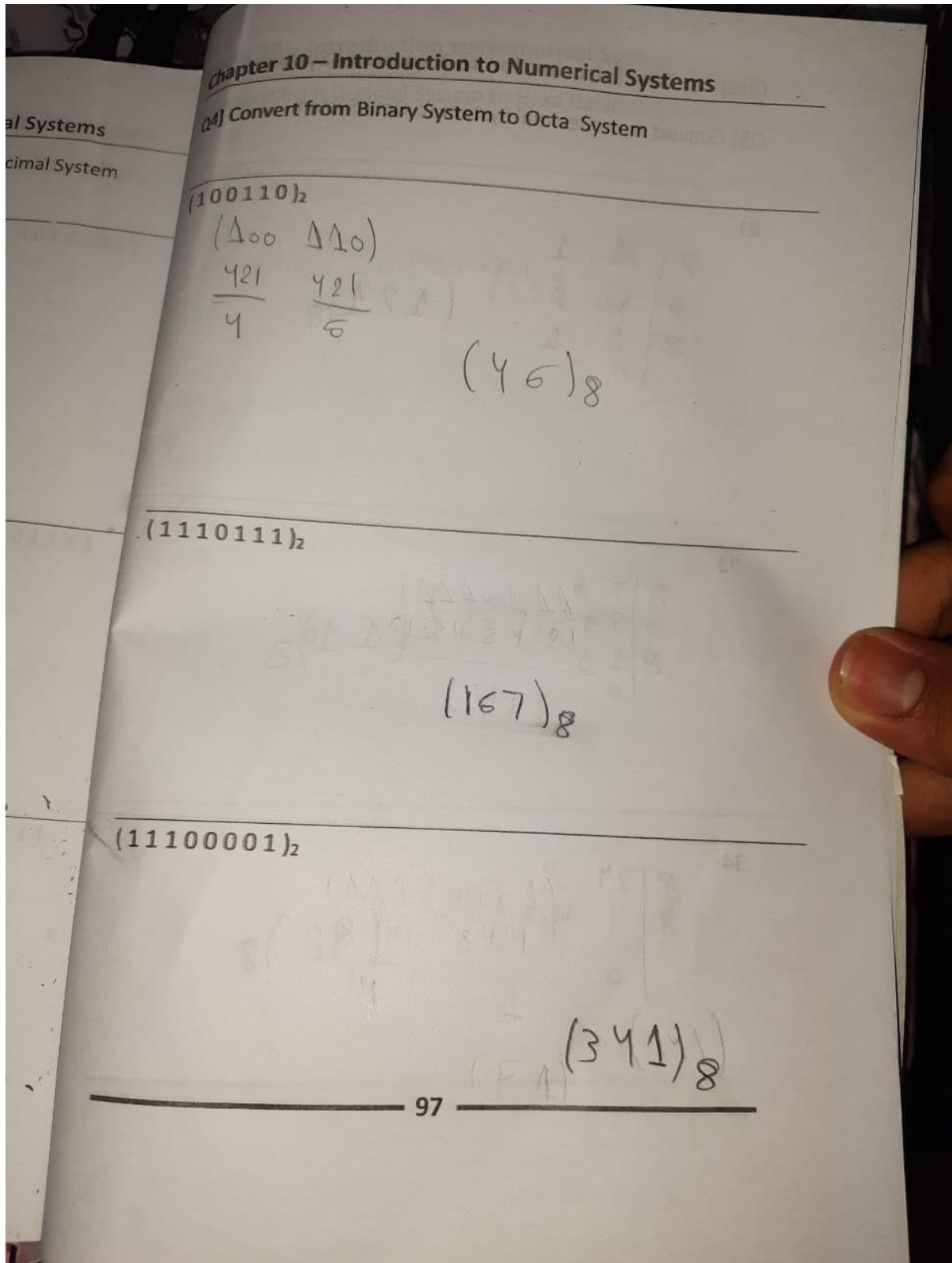
EELU_BNS



جميع الحقوق محفوظة للجروب

[HTTPS://T.ME/JOINCHAT/FLECRWVLQ7VPRNLB](https://t.me/joinchat/flecrwvlq7vprnlb)

EELU_BNS



جميع الحقوق محفوظة للجروب

[HTTPS://T.ME/JOINCHAT/FLECRWVLQ7VPRNLB](https://t.me/joinchat/flecrwvlq7vprnlb)