

## UNIT 12 *One-Time Pads*

## Overhead Slides

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### **Overhead Slides**

- 12.1 Letters  $\leftrightarrow$  Numbers
  - 12.2 Additive Key
  - 12.3 Subtractive Key
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**OS 12.1***Letters ↔ Numbers*

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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	0

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# OS 12.2

## *Additive Key*

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### Encryption

$$\begin{array}{r} \text{S E C R E T} \\ + \text{F X I P U F} \\ \hline \end{array} \Rightarrow \underline{\hspace{10em}}$$
$$\begin{array}{r} \underline{\hspace{10em}} \\ \leftarrow \end{array}$$

### Decryption

$$\begin{array}{r} \text{Y D L H Z Z} \\ - \text{F X I P U F} \\ \hline \end{array} \Rightarrow \underline{\hspace{10em}}$$
$$\begin{array}{r} \underline{\hspace{10em}} \\ \leftarrow \end{array}$$

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# OS 12.3

## *Subtractive Key*

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### Encryption

<b>S E C R E T</b>		
<b>- F X I P U F</b>	$\Rightarrow$	_____
_____		_____
_____	$\Leftarrow$	_____

### Decryption

<b>M G T B J N</b>		
<b>+ F X I P U F</b>	$\Rightarrow$	_____
_____		_____
_____	$\Leftarrow$	_____

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