

- a. Using the two keys (memory words) *cryptographic* and *network security*, encrypt the following message: “Be at the third pillar from the left outside the lyceum theater tonight at seven. If you are distrustful bring two friends.”

Make reasonable assumptions about how to treat redundant letters and excess letters in the memory words and how to treat spaces and punctuation. Indicate what your assumptions are.

*My assumptions are to ignore any spacing and punctuation in the message, remove any redundant letters from the memory words, and ignore excess letters in the memory words.*

Removing the redundant letters from: “CRYPTOGRAPHIC” is “CRYPTOGAHI”

<b>2</b>	<b>8</b>	<b>10</b>	<b>7</b>	<b>9</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>5</b>
<b>C</b>	<b>R</b>	<b>Y</b>	<b>P</b>	<b>T</b>	<b>O</b>	<b>G</b>	<b>A</b>	<b>H</b>	<b>I</b>
B	E	A	T	T	H	E	T	H	I
R	D	P	I	L	L	A	R	F	R
O	M	T	H	E	L	E	F	T	O
U	T	S	I	D	E	T	H	E	L
Y	C	E	U	M	T	H	E	A	T
R	E	T	O	N	I	G	H	T	A
T	S	E	V	E	N	I	F	Y	O
U	A	R	E	D	I	S	T	R	U
S	T	F	U	L	B	R	I	N	G
T	W	O	F	R	I	E	N	D	S

Encrypted Message: TRFHE HFTIN BROUY RTUST EAETH GISRE HFTEA TYRND IROLT AOUGS HLLT INIBI TIHIU OVEUF EDMTC ESATW TLEDM NEDLR APTSE TERFO

Removing the redundant letters from: “NETWORK SECURITY” is “NETWORKSCU”

<b>4</b>	<b>2</b>	<b>8</b>	<b>10</b>	<b>5</b>	<b>6</b>	<b>3</b>	<b>7</b>	<b>1</b>	<b>9</b>
<b>N</b>	<b>E</b>	<b>T</b>	<b>W</b>	<b>O</b>	<b>R</b>	<b>K</b>	<b>S</b>	<b>C</b>	<b>U</b>
T	R	F	H	E	H	F	T	I	N
B	R	O	U	Y	R	T	U	S	T
E	A	E	T	H	G	I	S	R	E
H	F	T	E	A	T	Y	R	N	D
I	R	O	L	T	A	O	U	G	S
H	L	L	E	T	I	N	I	B	I
T	I	H	I	U	O	V	E	U	F
E	D	M	T	C	E	S	A	T	W
T	L	E	D	M	N	E	D	L	R
A	P	T	S	E	T	E	R	F	O

Encrypted message: ISRNG BUTLF RRAFR LIDL P FTIYO NVSEE TBEHI HTETA EYHAT TUCME HRGTA IOENT TUSRU IEADR FOETO LHMET NTEDS IFWRO HUTEL EITDS

- a. Decrypt the ciphertext. Show your work.

Encrypted message: ISRNG BUTLF RRAFR LIDL PFTIYO NVSEE TBEHI HTETA EYHAT TUCME HRGTA IOENT TUSRU IEADR FOETO LHMET NTEDS IFWRO HOTEL EITDS

1	N	I	S	R	N	G	B	U	T	L	F
2	E	R	R	A	F	R	L	I	D	L	P
3	T	F	T	I	Y	O	N	V	S	E	E
4	W	T	B	E	H	I	H	T	E	T	A
5	O	E	Y	H	A	T	T	U	C	M	E
6	R	H	R	G	T	A	I	O	E	N	T
7	K	T	U	S	R	U	I	E	A	D	R
8	S	F	O	E	T	O	L	H	M	E	T
9	C	N	T	E	D	S	I	F	W	R	O
10	U	H	U	T	E	L	E	I	T	D	S

Message: TBEHI HTETA RRAFR LIDL PFOETO LHMET HOTEL EITDS EYHAT TUCME HRGTA IOENT FTIYO NVSEE TUSRU IEADR ISRNG BUTLF NTEDS IFWRO

1	C	T	R	F	H	E	H	F	T	I	N
2	R	B	R	O	U	Y	R	T	U	S	T
3	Y	E	A	E	T	H	G	I	S	R	E
4	P	H	F	T	E	A	T	Y	R	N	D
5	T	I	R	O	L	T	A	O	U	G	S
6	O	H	L	L	E	T	I	N	I	B	I
7	G	T	I	H	I	U	O	V	E	U	F
8	A	E	D	M	T	C	E	S	A	T	W
9	H	T	L	E	D	M	N	E	D	L	R
10	I	A	P	T	S	E	T	E	R	F	O

Message: BROUY RTUST EDMTC ESATW APTSE TERFO TIHIU OVEUF TLEDM NEDLR HLLET INIBI EAETH GISRE HFTEA TYRND IROLT AOUGS

B	E	A	T	T	H	E	T	H	I
R	D	P	I	L	L	A	R	F	R
O	M	T	H	E	L	E	F	T	O
U	T	S	I	D	E	T	H	E	L
Y	C	E	U	M	T	H	E	A	T
R	E	T	O	N	I	G	H	T	A
T	S	E	V	E	N	I	F	Y	O
U	A	R	E	D	I	S	T	R	U
S	T	F	U	L	B	R	I	N	G
T	W	O	F	R	I	E	N	D	S

Decrypted message: BE AT THE THIRD PILLAR FROM THE LEFT OUTSIDE THE LYCEUM THEATRE TONIGHT AT SEVEN IF YOU ARE DISTRUSTFUL BRING TWO FRIENDS