

Multiplexor Arrangements

Solutions to Group Work

Mr. H. Leijon, ITU



UNION INTERNATIONALE DES TELECOMMUNICATIONS
INTERNATIONAL TELECOMMUNICATION UNION
UNION INTERNACIONAL DE TELECOMUNICACIONES



MULTIPLEXORS

"Book-keeping"

1920	480	480	120	120	30
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M4	M301	M201	30
	B	M301	/
	C	C	/
	E	C	/
	M201	D	/
	M202	D	/
M4	M3	M202	30
		M301	/
		D	/
		E	/
		E	/
		E	/
M4	M3	M2	120
			/
			/
			/
M4	M3	M2	120
			/
			/
			/
M4	M3	M2	480
			/
			/
			/
M4	M3	M2	480
			/
			/
			/

PASSING SYSTEMS

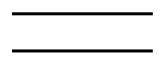
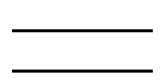
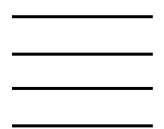
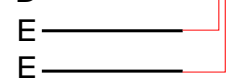
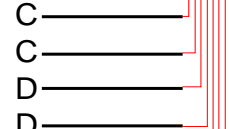
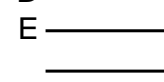
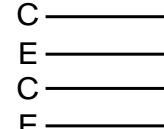
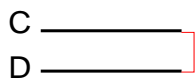
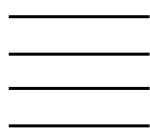
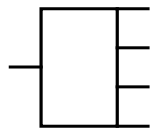
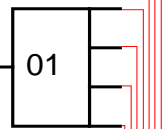
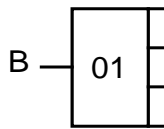
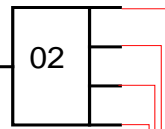
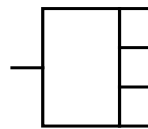
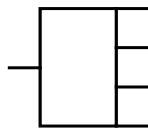
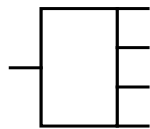
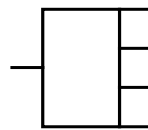
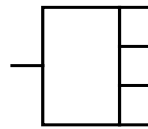
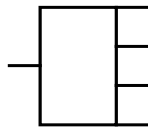
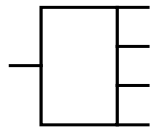
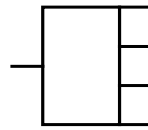
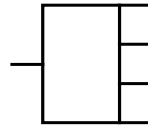
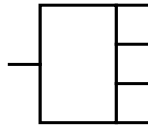
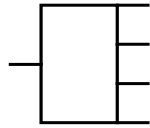
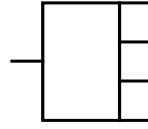
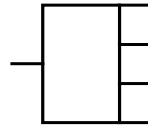
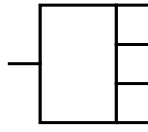
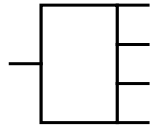
1920	480	120	30
/	C/D	C/E	/
/	/	D/E	/
/	/	/	/
/	/	/	/
/	/	/	/

M4
1920 / 480

M3
480 / 120

M2
120 / 30

Case a)



30

Work Sheet III

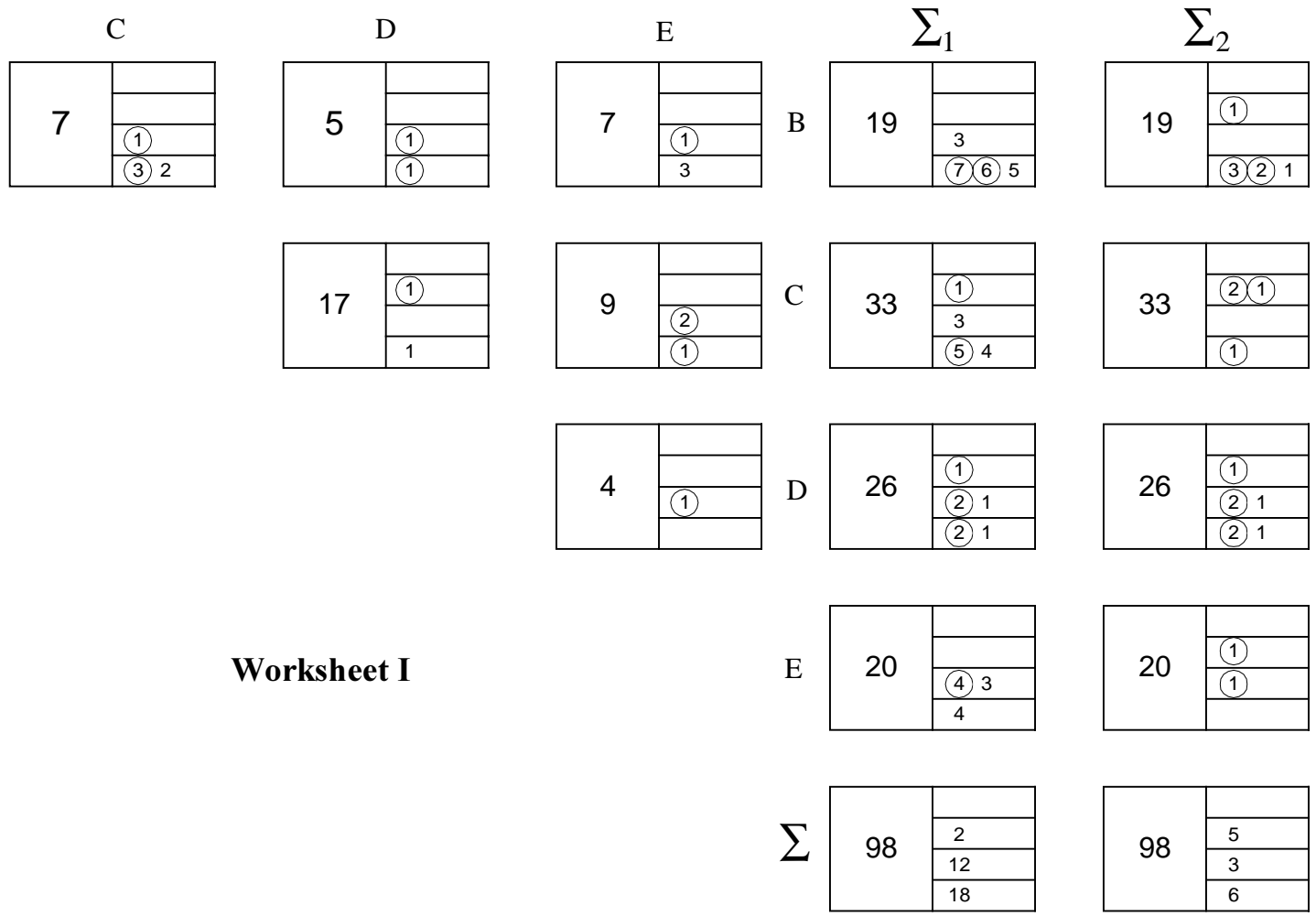
480

120

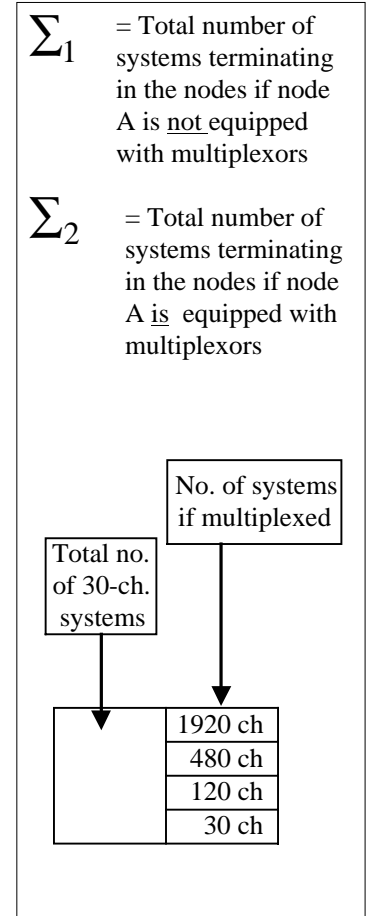
30

30

Case b)



Worksheet I



M U L T I P L E X O R S

1920	480	480	120	120	30
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"Book-keeping"

M4 []	M301 B M302 M303 D M201	M201 M301 (B) M202 M202 M203 M203	30 B / E / / /
M4 []	M302 C M301 M303 M303 M202	M202 M302 (C) M201 M201 D M203	120 / / / /
M4 []	M303 E M301 M302 M302 M203	M203 M303 (E) M201 M201 M202 B	480 / / / /
M4 []	M3 []	M2 []	480 / / / /
M4 []	M3 []	M2 []	480 / / / /
M4 []	M3 []	M2 []	480 / / / /

P A S S I N G S Y S T E M S

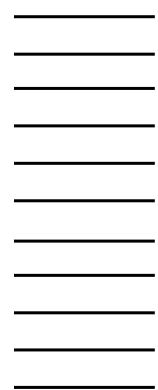
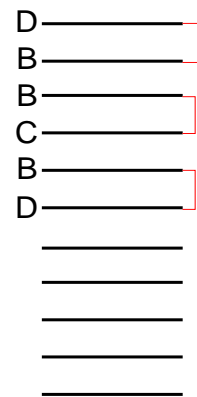
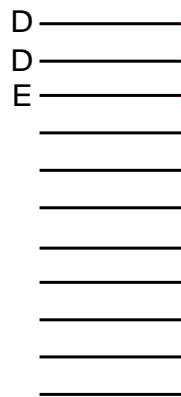
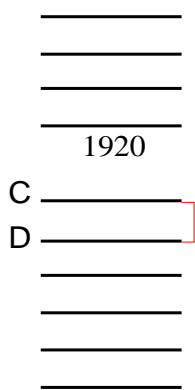
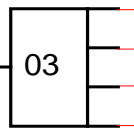
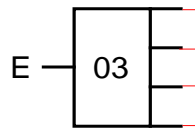
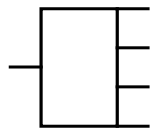
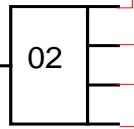
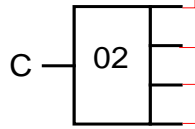
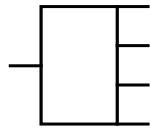
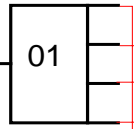
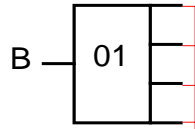
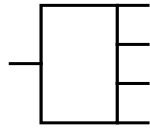
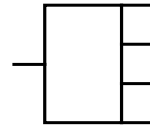
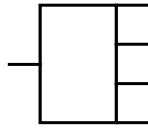
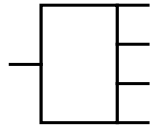
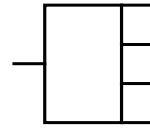
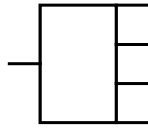
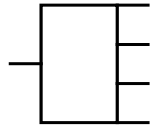
1920	480	120	30
/	C / D	D / E	B / C
/	/	/	B / D
/	/	/	/
/	/	/	/
/	/	/	/

Case b)

M4
1920 / 480

M3
480 / 120

M2
120 / 30



Work Sheet III

480

120

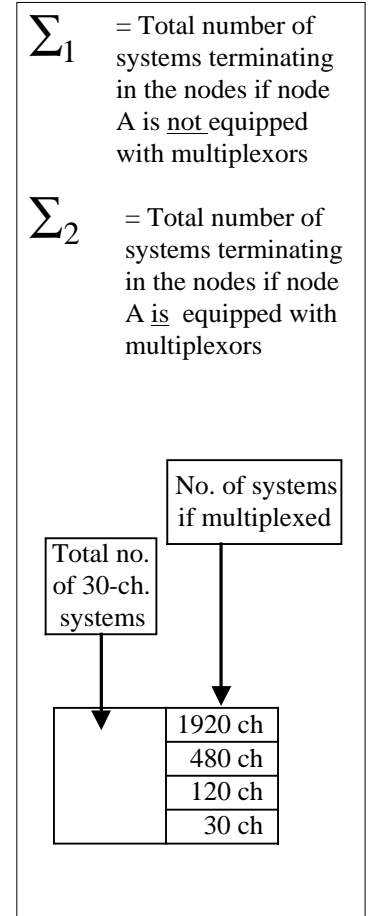
30

30

Case c)

C	D	E	Σ_1	Σ_2																
70	25	40	135	135																
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12																				
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6																				
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1920 ch																				
480 ch																				
120 ch																				
30 ch																				

Worksheet I



MULTIPLEXORS

"Book-keeping"

1920	480	480	120	120	30
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M401

B	M402
	M403
	M403
	M301

M301

M401 (B)	M302
	M302
	M303
	M303

M201

M304 (C)	B
	B
	D
	E

30
C / B
C / B
C / D
C / E

M402

D	M401
	M403
	C
	M302

M302

M402 (D)	M301
	M301
	M303
	M303

M2

M403

E	M401
	M401
	M402
	M303

M303

M403 (E)	M301
	M301
	M302
	M302

M2

120
D / E
/
/
/

M4

M304

C	M305
	M305
	M305
	M201

M2

M4

M305

E	M304
	M304
	M304
	D

M2

480
/
/
/
/

M4

M3

M2

PASSING SYSTEMS

1920
B / C
/
/
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480
C / D
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120
B / C
C / D
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30
B / D
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