

Site

Square

Stratum

Total
 Y va m. etc.
 Height
 Slab B
 Slabs +
 Plinth
 Height (Slab E)

cp?	K-5-3	R	R-10-15 ^{1/2}	0					
cp	R-9		K-5-3	cp?					
	R-10-15 ^{1/2}		R-3-2	?					
	R-3-2		R-9	vcp					
	R-10-2		R-10-2	0					
	R-1		R-3-1	✓					
	R-16-2		R-1	✓					
cp	S-3		S-3	vcp					
	R-3-1		K-5-2	?					
	O-13(2 +m)		R-5	0					
cp	S-29		O-12	0					
	R-5		K-5-1	cp					
	K-5-2		S-4	cp?					
cp	K-5-1		S-29	vcp					
cp?	S-4		R-4?	?					
	O-12		R-16-1	cp					
cp	R-16-15 ^{1/2}		O-13-15	cp					
	R-4			?					
cp	O-13-1			?					

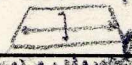
Scales : { Gawra — 50 : 1
 Billa — 100 : 1

Site

Square

Stratum

Pyramids in order of Proportions, tenon height (total) to length.



Tenon

abs. tenon height (width)

+ abs. tenon height.

10-Tenon w. h. h. %

Slices

in order of abs. total tenon height

B

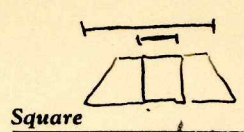
26	K-5-34	11	11	2	4.37		46%		K-5-34	4.37
26	O-13-15	14	14	2	8.15		26%	(+R00)	R-9	5.00
26	R-9	18	18	2	5.00		60%		(R-10-15)	5.39
	O-13-15	22			12.23	12.78	26%	(+R00)	R-3-24	6.17
26	R-16-24	21	21	2	7.21	8.61	35%	(+R00)	R-10-24	6.59
	I-3	22?			7.22	19.65	50%		R-1	6.73
	K-5-24	23			8.75		46%		R-16-24	7.21
	K-5-15	23(24)			8.75		46%		I-3	7.22
	R-1	26	26	3	6.73		50%		R-10-15	7.30
	R-10-15	28			5.39		44%		O-13 (26)	8.15
	I-4	28			8.58	19.58	54%			
	O-12	29	29	3	8.93		50%	(36)	I-29	8.17
	R-5	30	30?	3	8.38		48%		R-5	8.38
	R-3-24	30	30	3	6.17		35%			
	R-16-15	31			10.68	12.08	35%		K-5-24	8.75
	R-10-24	35	35	4	6.59		44%		K-5-15	8.75
	R-3-15	36			7.30		35%		I-4	8.88
	I-29	37			(4 11.53 ²)	14.87	60%?		O-12	8.93
	R-4	42	42	3	11.73	11.73	24%		R-16-15	10.68
									R-4	11.73
									O-13-15	12.23

change order for 3 tenon pyr. after reconstruction.

x "sandy" original pyramids

Scales: { Gawra - 50:1 Billa - 100:1

Pyramid
Stair Proportions
Front Elevation
% width of height.



same
% Py. length to height.
Stair.

A

"narrow ratios"	*	K-5-3rd	305	Sure	Orig.	35%	11%	Covers doors etc.	R-16-1st	13%
		O-13-1st	152			34%	21%?	little (plants in red P?)	R-9	25% change?
		R-1-1st	141	Sure Rec.		37%	26		K-5-2nd	29 changed
		O-12	140	Sure Rec.		41%	29		R-5	31 Rec.
	x	K-5-2nd	136	Sure Rec.	Orig. (new stairs)	29%	23%		* R-4	32
	⊗	R-9	134	Sure Rec.		25%	18		* R-10-2nd	33
	*	R-3-2nd	113			34%	30		R-10-1st	33
	⊗	R-10-1st	107	Sure Rec.		33%	28		* R-3-2nd	34
	⊗	R-5	104	Rec.		31%	30		* O-13-1st	34
	*	R-3-1st	96	Sure Rec.		34%	36		R-3-1st	34
	⊗	R-10-2nd	89	Sure Rec.		33%	35		x K-5-3rd	35
		J-29	81		added height?	39%?	26-37-48		R-1-1st	37 Rec.
	*	R-4	76	Sure Rec.		32%	42	Bus m.	J-29	39
		J-4	75	good Rec.	added height	47%	28	Bus m.	O-12	41
		J-3	69		added height	41%	22?		J-3	41 Rec.
front	⊗	R-16-1st	38	?	little added height.	13%	31%	Bus m.	J-4	47

⊗ Py. length will be controlled by debris

R-16 shows a break. Apart from it, known stairways widths must be at least 3/4 of the height. May be 3 times the height.

Scales: { Gawra - 50:1
Billa - 100:1

Site

Square

Stratum

Pyramids in order of Proportions, Tenno height (total) to length.

10-Tenno width

70

Sketches

Major Tenno

In order of Abs. total Tenno height

10-Tenno width

70

Sketches

Major Tenno

In order of Abs. total Tenno height

Site	Square	Stratum	Proportions, Tenno height (total) to length	Tenno height (total)	Length	Width	Area	Volume	Percentage	Notes
26a	K-5-34		11	11	2	4.37		46%		K-5-34 x 4.37
26a	O-13-10		14	14	2	8.15		26%	(+R00)	R-9 x 5.00
26a	R-9		18	18	2	5.00		60%		(R-10-12) 5.39
26a	O-13-10		22			12.23	12.78	26%	(+R00)	R-3-24 x 6.17
26a	R-16-24		21	21	2	7.21	8.61	35%	(+R00)	R-10-24 x 6.59
	S-3		22?			7.22	19.65	50%		R-1 x 6.73
	K-5-24		23			8.75		46%		R-16-24 x 7.21
	K-5-15		23			8.75		40%		
	R-1		26	26	3	6.73		50%		S-3 7.22
	R-10-12		28			5.39		44%		R-3-15 7.30
	S-4		28			8.88	19.58	54%		O-13 (26a) 8.15
	O-12		29	29	3	8.93		50%	(36a)	S-29 8.17
	R-5		30	30	3	8.38		48%		R-5 x 8.38
	R-3-24		30	30	3	6.17		35%		
	R-16-15		31			10.68	12.08	35%		K-5-24 8.75
	R-10-24		35	35	4	6.59		44%		K-5-15 8.75
	R-3-15		36			7.30		35%		S-4 8.88
	S-29		37			(4 11.57 ²)	14.87	60%?		O-12 8.93
	R-4		42	42	3	11.73	11.73	24%		R-16-15 10.68
										R-4 x 11.73
										O-13-15 12.23

outlets only

Mark B.M.

Mark B.M.

Mark B.M.

change order for 3 tenacypy. after reconstruction.

x "sandy" original pyramids

Scales: { Gawra - 50:1 Billa - 100:1

Site

Pyramids - in order

Square

Stratum

widths only.

of Absolute widths of stairways.

Mid. Plat. (Plinth of base)
 Ald. Plat. (Substructure)
 Plinth of stairway
 of two or two steps of the pp.

		18.40 on ground						
0-13-19 ⁺	19.50	18.50	22.25	23.00	?	?		
0-13 Red Pl.	19.50	?	?	18.70	?	?		
J-4	14.60	7.70	12.72	14.70 (Plinth)	9.90	same		
J-3	13.50	w. Aly.	w. Aly.	17.80	?	?		
K-5-3d	13.34	13.34	21.14	25.46	13.34	same		
0-12	12.62	7.14± (30m)		?		same		
J-29	12.00±	7.40	11.40	12.60 (low end)	?	plinth		
K-5-2d	10.95	?	?	?	?	?		
K-5-1d	10.95	7.10 Rec	12.44 Rec	16.60 on ground	?	?		
R-1	9.50	8.40 Rec	12.60	14.55	7.10	same		
R-4	8.97	?	?	?	?	?		
R-5	8.75	6.85	11.50	12.60	?	?		
R-3	7.00	single	8.75 Rec		?	?		
R-9	6.70	6.20	9.10	12.00	6.20 Rec	same		
R-10	6.20	single	6.20 Rec	?	?	?		
R-16 ¹⁵	4.60	8.00 Rec	11.70	13.60	11.60±	6.70 Rec		

side wall of stairway, extended, should line up with side of upper element of Bldg. platform, with outer side of side doorway, or somewhere between.

Cond. Stair widths may cover doorways - 0-13-19⁺ (close); Plinth in Red Plaster never less, except R-16-19⁺, unknown.
 May cover Bldg. or Bld. + Plinth: J-4, J-29, R-9-19⁺ (close).

Scales: { Gawra - 50:1
 Billa - 100:1

May be greater than doorways but less than Aly. (R-1, R-5 and Aly. (J-4 only not case);
 May not exceed Bldg. Plat. (upper unit, apart from steps plinth).

Summary

Pyramid Temples.

Site: Top of blintha height above base of Pyr. proper. (Col 15 + I)
 Square: Arranged in this order.
 Stratum: Bldg. placed in order of height.

Site	Square	Stratum	Height	Area	Notes
H	K-5-3 ^h	R-10-1 ^h	4.37 2.30	6.67	5.94
H	R-9	K-5-3	5.00 2.00	7.00	6.67
L	R-10-1 ^h	R-3-2 ^h	5.39 55	5.74	6.97
L	R-3-2 ^h	R-9	6.17? 80	6.97	7.00
L	R-10-2 ^h	R-10-2 ^h	6.59 55	7.14	7.14
H	R-1	R-3-15 ^h	6.73 1.52	8.25	7.95
?	R-16-2 ^h	R-1	7.21 ?	?	8.25
cp H	T-3	T-3	7.22 2.90	9.12	9.12
L	R-3-13 ^h	K-5-2 ^h	7.30 65	7.95	9.41
?	G-13/2 ^h	R-5	8.15 ?	?	9.58
Comp H	J-29	G-12	8.17 3.90	12.07	10.88
M	R-5	K-5-1	8.38 1.20	9.58	11.35
5. L	K-5-2 ^h	T-4	8.75 .66	9.41	11.48
Comp H	K-5-10	T-29	8.75 2.60	11.35	12.07
H	T-4	R-4	8.88 2.60	11.48	12.23
H	G-12	R-16-1 ^h	8.93 1.95	10.88	14.72
Comp H	R-16-1 ^h	G-13-4	10.68 4.04	14.72	14.89
?	R-4		11.73 50+	12.23 +	
Comp	G-13-1 ^h		12.23 2.66 +	14.89	



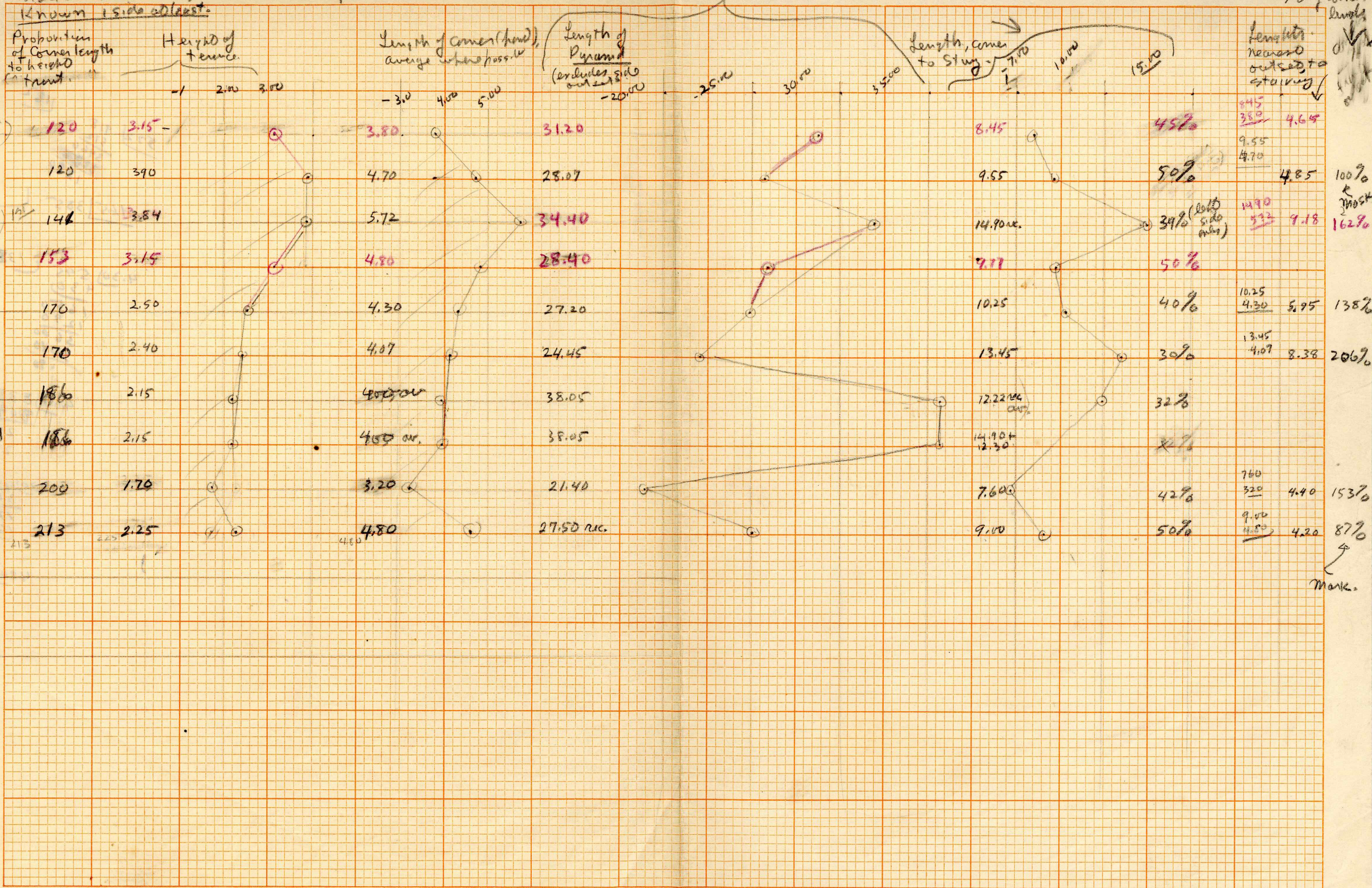
↑
in order of
terraces
height.

Scales: { Gawra — 50:1
Billa — 100:1

Block a lowest level, known inside oldest.

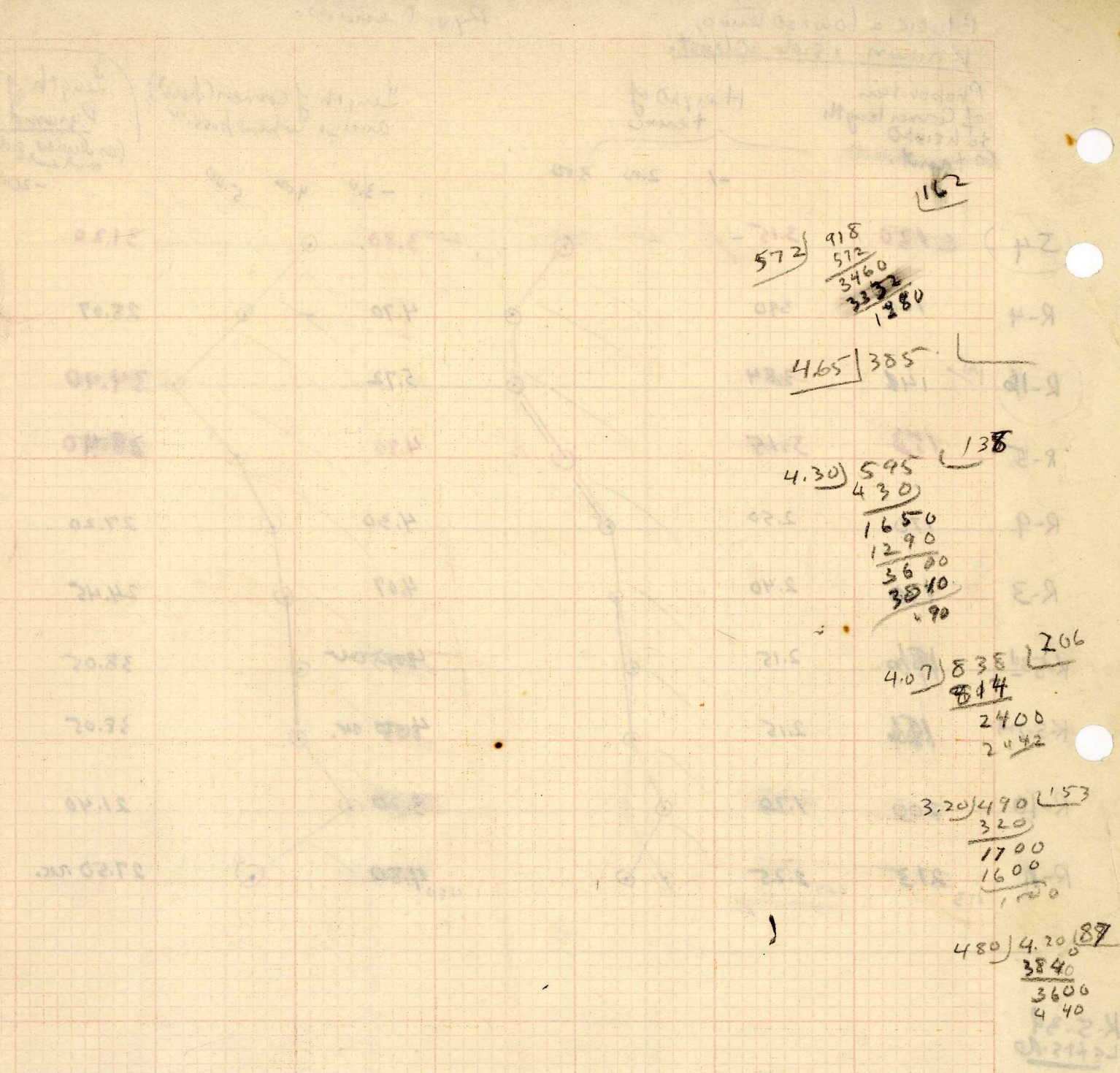
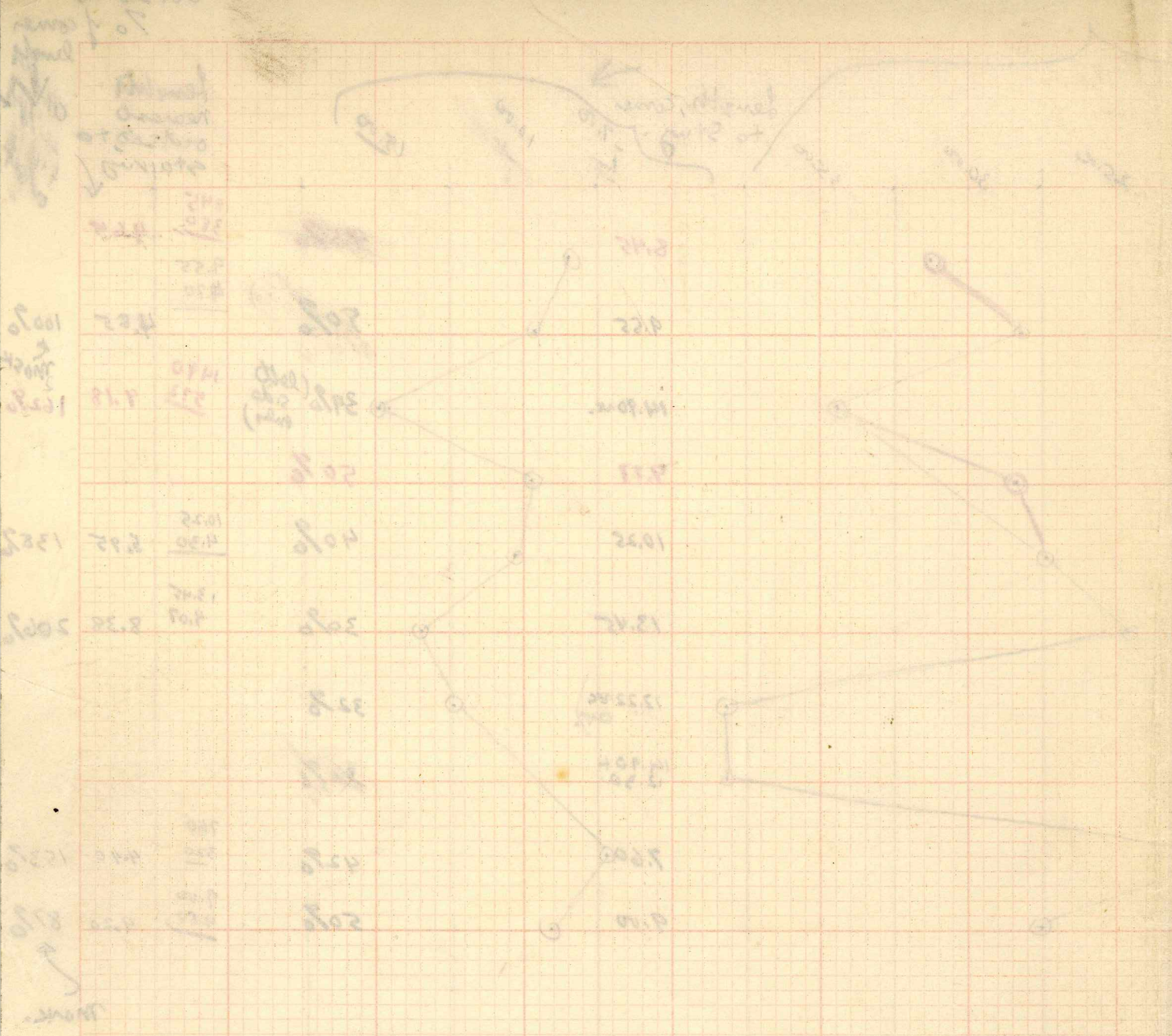
Ry. T. tunnel.

outside is % of corner levels



K-S-3d LEFT SIDE

Mark



Temples:

Peter Tenace
analysis.

See sheet for collected measurements.

The length of inset corner portion of front and side seems to be more or less equal in intention, variations probably being intentions:

The side is following her end of front: (Known cases)

Case	Percentage	Notes	Tenace heights
R-3	100%	(lowest Tenace)	2.25
R-10	92%	"	1.70 (+ basal ledge)
R-16	104%	"	3.84
S-4	90%	(2nd Tenace)	2.70
K-5-3d	100%	(lowest Tenace)	2.15

The 2 90% cases would suggest reducing sides in proportion to shorter total side length, but: in neither case is this known.

i.e. shorter
→ side

Where it is probable (R-16) and certain (K-5-3d) we find the reverse situation. (but very close to equality.)

①

Conclusion - As general reconstruction principle, make the inset corners with equal sides, whether pyramid is long or square.

This point is not affected by Tenace height, since the extremes of variation in each direction are known from since the longest side is about equal (actually slightly lower) to its height to the 100% R-1; the shortest proportion occurs Tenaces lower and decidedly higher than this; the highest Tenace represents is very close to 100%.

Maximum known variation is ~~10%~~ 10%; but of Tenace heights, 44%.

3.84 / 1700 = 44%
1536
1640
1536
104

②

This length (front or back) should be at least 120% of Tenace height (shortening of lowest Tenace) but this can go to 213% (See chart & graphs).

It is 62% + 50% of total distance, corner to string in the two cases where the outset is a mask (R-1 + R-4).

This was combined with Rule ① on R-1 & yielded reasonable results higher up: On R-1, if apply Rule 1, central mass in 3rd Tenace seems a little short, but not bad: py. depth is a constant: and this could be minimized by lessening lateral displacements from Tenace to Tenace: this yields a relation to ~~py.~~ Temple structures - see tracing. 62% covers R-3 (Bido known) + R-1, a mask front known ∴ masks don't seem to affect things;

② - cont'd.

Percentages; based corner length to total length, corner to string. (not counting side

R-1	53%	} Mask outlets at front.	outlets as seen in front elevation.
R-4	50%		
R-3	30%		
R-10	42%		

Percent of
Plain outlet
adjacent to string.

(Mask) 47%	R-1 - 62%
38%	R-3 - 62%
(Mask) 50%	R-4 - 50%
	R-5 - ?
58%	R-10 - 50%
	R-16 - ?
55%	J-4 - 45%
58%	R-9 - 42%
av. 39 1/2% } 33%	K-5-3d - 34% (at side)
	" - 31% (left side)

- adding 2nd trans outlet, line is 63% } av. 58 1/2%
54%

With single outlet at front; used corner length limits, as known, are 42% to 62% of distance corner to string.

With double outlet this drops to average of 39% (K-5): usually 33% was tolerated on no side. But 58% is "traced" by the combination.

∴ 42% is lowest percentage for treatment; 50% a good mean.

12.22	7.100	58%
	6110	
	9900	
	9776	

Stairway width

Limits, width to height: (known) see sheet A

2 tenon 134 to 305% of height. (R-9 + K-5-3d).

3 " 38 to 152% " " (R-16 + O-13-15).

Limits width to length of Pyramid (corner to corner):

13% (R-16-19). A hard from this

25 to 47%.

see sheet A.

" Original pyramids on plaza or basal tenon:

25% (R-9) to 41% (~~R-16~~^{O-12}).

Lacking other control, 33% is most likely: R-9 may be changed to cover doorways of shunter temple and next is 31% (R-5), next good measurement is 32% (R-4)

Stairway Proportions (found elevations). ~~width % of~~

Limits with ref. to Bldg. units (or vice-versa)

see sheet D

Stairwidths, as known:

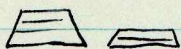
lie between ³multiple door coverage or its equivalent (K-5-3d, R-9) and Plinth-platform coverage. (J-4, J-29±).

Exception: R-16-15, which is also badly off center + a hook in absolute width. No other case where stair width fails to cover doorways, even in 5-door case.

Pyramid - general Proportions.

Tenaces only)

Limits, Pyr. height, % of length (corner to corner).



2 Tenaces: 11% to 21% (K-5-3 + R-16-2nd). R-9, good meas. is 18%.

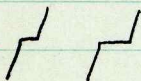
3 Tenaces. 22% (O-13-17E) to 42% (R-4).

See sheet B

Limits, Tenace widths, % of height (lowest only).

24% to 60% (R-4 + R-9).

See sheet C.



~~Note~~ R-4 + O-13 are only ones below 35%.

35% appears with low (R-3) + High (R-16) tenaces.
in both cases rather sure measurements.

44% + 46% are also rather sure for R-10 + K-5.

Higher percentages in value reconstructions.

Limits, Tenace Heights

192 Tenac: 1.72 m to 4.07 m.

Note: low and high tenaces occur in 2-tenace pyramids.
(2.18 K-5, 4.07 O-13).

Also in 3-tenace pyramids (2.23 ^{R-1} ~~R-1~~; ~~2.00 R-1~~; 3.92 R-4).

Only low tenaces on 4-tenaced Pyramids (1.72 R-10, 2.18 K-5-2nd 1/5)

- Improbable exceptions:

J-29 (if 4 or 5-tenace pyramid, 3.40

J-3 "6 or 7" " , 4.26

- Secondary exception. O-13 (the secondary tenaces which produce 4-ten. pyramid or low, placed on high ones, and set back as separate unit.

Tenoco Heights - cont'd.

All Tenocos:

2-ter Pyp. - May be equal (K-5-3^d, O-13, R-9).
" " Tendency for upper to be lower (R-16) - not the reverse.

3-ter Pyp. - May be equal - R-3-1st, R-4, R-9,

- Two equal with top lower - R-5 (?), O-12,
(i.e. top only lower)

- Two upper lower - J-4, R-16-1st, R-3-2nd (rec)
(i.e. 2 tops lower)

4-ter Pyp. - equal (K-5); 2 upper lower (O-13-1st).

3 " + top lower (R-10)

2 " + 2 upper lower (O-13-1st - set back - self unit.).

In general: upper tenoco = 1st, or may be somewhat lower.

No case where an upper tenoco is higher than lower ones except upper J-3 tenoco, where levels are not too sure.

Tenoco widths - equal - K-5. (+ in general - but little def. data.)

Upper tenoco may be wider - R-3-2nd (rec) } final tenoco also lower.
- J-29

J-3 (?) } final tenoco
wider to higher.

" " narrower R-10 (under stuff). (final tenoco is lower).

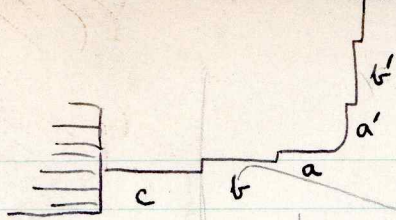
Stuy height

Top above Plaza

In order of Py. Top above Plaza.

K-5-30	4.37		1	6.02		K-5-30	6.02 x		
R-9	5.00			7.20		R-10-2nd	6.97 x	}	
R-10-2nd	5.77			6.97		R-10-1st	6.97		
R-3-2nd	6.17			7.67					
R-1	6.73	MUSIC		9.08		R-9	7.20 x		
R-10-1st	6.97			6.97		R-3-2nd	7.67 x		
R-3-1st	7.30			8.80		O-13-2nd	8.15		
O-13(2)	8.15		Pyramid row	8.15		R-3-1st	8.80		
R-5	8.38			10.68		R-1	9.08 x		
R-16-2nd	8.61	B. masonry		9.61		R-16-2nd	9.61 x		
K-5-2nd	8.75			10.40		K-5-2nd	10.40		
K-5-1st	8.75	(MUSIC)		10.40		K-5-1st	10.40		
O-12	8.93			10.93		R-5	10.65 x		
						O-12	10.93		
R-4	11.73	MUSIC + B. masonry		13.23		O-13-1st	12.78	} high terraces	
O-13-1st	12.78			12.78		R-16-1st	13.08		
R-16-1st	12.08			13.08		R-4	13.23 x		
S-29	14.87			18.70		S-29	18.70		
S-4	19.58	Masonry		24.75		S-4	24.75		
S-3	19.65			25.99		S-3	25.99		

Scales: { Gawra — 50:1
Billa — 100:1



Pyramid Fence Design.

no counting side outlets.

K. Peter.

Approximately Square.

OK long to width
a.g. levels?
Lower 20
T. ...
H. ...

Stuy Corner to Stuy
Pyr. Prod

lengths

a-a' %

4.10
over

	a	a'	b	b'	c		b = music:	9.50	8.10 ±	25.50	
R-1	5.00 ±	?	3.65*	?	X	2.25					
R-3	4.08	4.15	2.60*	2.37	X	2.40		71.00	16.72	20.45	
R-4	4.70	?	4.85*	?	X	3.90	b = music	8.97	9.55	28.07 Rec.	(TAP 25.50 on 80)
R-5	1.75 <u>nc.</u>	1.75 <u>nc.</u>		2.50 <u>top</u>		2.38		8.75 Rec.	9.77 Rec.	28.40 Rec.	
R-10	3.22	2.95	3.18*	2.88?	X	1.70	(1.60 to 1.76, noD incl. board length)	6.20	6.40	19.00 Rec.	3.29) 2950 89.4 2632 90.0 3180 2961 219
R-16-1st								4.60	14.60 to 15.20 (100 + 14.90)	34.40 Rec.	
R-16-2nd	5.72	5.98				3.84				34.40	
J-3						3.15		13.50	2	2	
J-4	3.80 <u>nc.</u>	3.33 <u>nc.</u>	4.65*	2.55 <u>nc.</u>		3.15		14.60 Rec.	8.45 <u>nc.</u>	31.20 Rec.	
(2nd level =	3.10	2.75	2.95*	2.56		2.70	2nd fence				
<u>Long.</u>											
R-9	4.30	?	6.00*	?		2.50		6.70	10.25	27.10	
K-5-1st	4.00 <u>nc.</u>	4.36 <u>nc.</u>	3.12 <u>nc.</u>	2.55	6.20 <u>nc.</u>	2.15 (av.)		13.34 <u>nc.</u>	12.36 <u>nc.</u>	38.05	
K-5-2nd								10.95	14.90 + 12.30 av = 13.60	38.05	
K-5-1st a											
K-5-3rd	3.80 <u>nc.</u>	4.49	3.20	2.60				13.34 <u>nc.</u>	11.18		
"	4.20	4.25	3.07	?				13.34	13.53		

2. - Plain designs.

O-12						3.10		12.62	9.00 ±	30.62 ±	3.10 2nd 3.20
I-29						3.30 (3.10 av. of 4)		12.00? (2.00 on 3)	9.50 ±	31.00 ±	
O-13						4.20		19.50 (30m)	17.85	56.84 ±	h. 4.00 2nd 4.10
* To ...											
J-3P)								13.50	9.75??	33.??	

add ~~to~~ ⁱⁿ
back

TKU

2 11 K-5-3d
2 14 0-13 1st 2 Tenues

2 18 R-9

1+2 21 0-13-1st x
2 21 R-16-2nd x

3? 22? S-3

22

4 23 K-5-2nd

3 26 R-1.

4 28 R-10-1st x
3 28 S-4

3 29 0-12

3 30 R-3-2nd

3 31 R-16-1st x

3 35 R-10-2nd x

3 36 R-3-1st

4? 37? S-29

3 42 R-4

11.57
3.40
8.17

0-12

30.62

8.930
6124
28060
27558
502

29%

S-29

31.00

14,870 2
12,400
2,470
2,480

48%? (stems)

31.00

11.570
9300
22700
21700
1000

37% (4 stems)

31.00) 8.170
6200
19780
18600
1100

26% (3 stems)

S-4

31.20

8.880
6240
2640
2496
144

28%

S-3

33.00

7,220
6600
6200
3300
2900

21 = 22% (3 stems)

R-16-2m9

34.40

7.210
6880
33300
30760
2540

20 = 21%

R-16-192

34.40

10.680
10320
3600
3440

31%

K-S-3d

<u>38.05</u>	4.370	11%
	3805	
	<u>5650</u>	
	3805	
	<u>1845</u>	

K-S-2nd

<u>38.05</u>	8.750	23%
	7610	
	<u>11400</u>	
	<u>11415</u>	

K-S-1st

<u>38.05</u>	8.75	23%	outside only ↓
			<u>30.40</u>
			8.750
			<u>6080</u>
			26700
			<u>24320</u>
			2380

28-29%

O-13 (19' 2
tenures) 56.84

<u>56.84</u>	8.150	14%
	5684	
	<u>24660</u>	
	<u>22736</u>	
	1924	

O-13

O-13-1st

<u>56.84</u>	12.230	21% = 22%
	11368	
	<u>8620</u>	
	5684	
	<u>2936</u>	

Pyramid Percentages ①

Stony width to hyp. length
(width div. by length)

	A	col G.	
R-10-2nd	19.00	6.200 5700 5000 3800 1200	.32 = 33%
R-10-1st	19.00	6.20 "	.33%
R-3-2nd art.	20.45	7.00 6135 8650 8180 470	.34%
R-3-1st	20.45	7.00	34%
R-1	25.50	9.150 7650 18500 17850 650	.37%
R-7	25.50		
R-9	27.20	6.70 5440 12600 10880 1720	.24 = 25% (may be secondary)
R-4	28.07	8.970 8421 5490 2807 2683	.31 = 32%
R-5	28.40	8.750 8520 2300	.30 = 31%

Col A.

Col G.

O-12

30.62

$$\begin{array}{r} 12,620 \\ 12,248 \\ \hline 3720 \end{array}$$

.41%

S-29

31.00 ±

$$\begin{array}{r} 12,500 \\ 9,300 \\ \hline 27,000 \\ 24,800 \\ \hline 2,200 \end{array}$$

.38 ± = 39% - at base (?)

S-4

31.20

$$\begin{array}{r} 14,600 \\ 12,480 \\ \hline 21,200 \\ 18,720 \\ \hline 2,480 \end{array}$$

.46 ± = 47% at 4th of 7 lenses.

S-3

33.00 ±

$$\begin{array}{r} 13,500 \\ 13,200 \\ \hline 3,000 \end{array}$$

.40 = 41% ± (at base of top 3 lenses (same idea as in S-4).)

R-16-2nd

34.40

2

$$\begin{array}{r} 3 \overline{) 34.40} \\ \underline{3} \\ 14 \\ \underline{12} \\ 20 \end{array}$$

R-16-1st

34.40

$$\begin{array}{r} 4,600 \\ 3,440 \\ \hline 11,600 \\ 10,320 \\ \hline 1,280 \end{array}$$

.13% ± off center.

col A

col G

K-5-39 38.05 13.340 35%
 18415
 19250
 19025

K-5-2nd 38.05 10.950 28 = 29%
 17610
 33400
 30440
 2960

K-5-191 38.05 10.95 29%

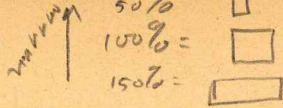
outsid_e only, plus c.
30.40 10.950 36%
 9120
 18300
 18240
 60

O-13
 (19.2 lens) 56.84 2
 1

O-13 56.84 ?

O-13-19 56.84 19.500 34%
 17052
 24480
 22736
 1744

From Price Table



String Height
(Col. F.)

Width
(Col. G.)

54
8
62

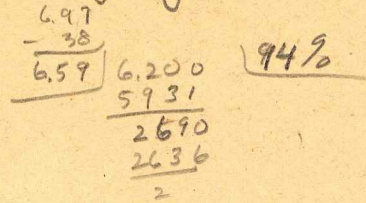
Percentages.

①

Pyramids:

String length into width
(i.e. width to length)

tenanguly:



R-10 - 2nd.

6.97 | 6.200 | 0.89%
 5576
 6240
 6273
 8

R-10 1st

5.77 | 6.20 | 1.07 1/2%
 577
 4300
 4038
 261

R-3-2nd tra

6.17 | 7.00 ? | 1.13% ?
 617
 830
 617
 2130
 1851
 279

R-3-1st

7.30 | 7.000 | 1.96%
 6570
 4300
 4380

R-1

6.73 | 9.50 | 1.4%
 673
 2770
 2692
 780

R-9

5.00 | 6.70 | 1.34
 5.00
 1700
 1500
 2000
 2000

over for
(3)

R-4

$$\begin{array}{r}
 11.73 \quad | \quad 8.970 \quad | \quad .76\frac{1}{2} \% \\
 \hline
 8211 \\
 7590 \\
 7038 \\
 \hline
 4
 \end{array}$$

R-5

$$\begin{array}{r}
 8.38 \quad | \quad 8.7500 \quad | \quad 104 \% \\
 \hline
 838 \\
 3700 \\
 3352 \\
 \hline
 348
 \end{array}$$

O-12

$$\begin{array}{r}
 8.93 \quad | \quad 12.62 \quad | \quad 140 \% \\
 \hline
 893 \\
 3690 \\
 3572 \\
 \hline
 \end{array}$$

J-29

$$\begin{array}{r}
 14.87 \quad | \quad 12.000 \quad | \quad 80+ = 81 \% \\
 \hline
 11896 \\
 1040 \\
 \hline
 \end{array}$$

J-4

$$\begin{array}{r}
 14.58 \quad | \quad 14.600 \quad | \quad .74 = 75 \% \\
 \hline
 13706 \\
 8940 \\
 7932 \\
 \hline
 1008
 \end{array}$$

J-3

$$\begin{array}{r}
 19.65 \quad | \quad 13.500 \quad | \quad .68 = 69 \% \\
 \hline
 14790 \\
 17100 \\
 15720 \\
 \hline
 1380
 \end{array}$$

over ↓

Col F
Stuy height

Col G
Stuy width

R-16-2nd

8.61

2

2?

R-16-1st

12.08

2

4.60 0.38 / 0
 3.624 0
 9760
 9632
 1280

K-5-3rd

4.37

13.340 3.05 / 0
 1311
 2300
 2185
 13

K-5-2nd + 1st

8.75

10.950 1.36
 8750
 3200
 2625
 5750
 5250
 43

O-13 (1st 2 lines)

8.15

2

O-13-1st

12.78

mm

14.50 1.52 - 1.53 / 0
 12.78
 6720
 6390
 3300
 2556
 7940

Oversized item not scanned