TEXAS INSTRUMENTS  
Calculator Products Division

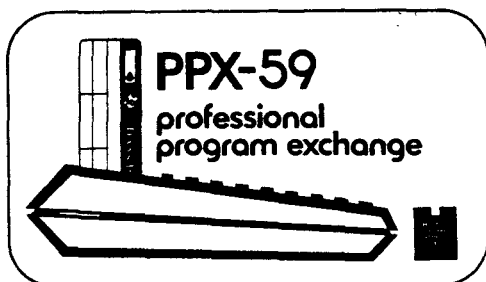
## Submission Abstract

Program Title		TRI	Rev.	A
<b>Abstract of Program</b> This program accepts 3 numbers which represent the 3 sides of a possible triangle. Not all sets of numbers will form a valid triangle. If this is the case, an error message, NOT A VALID TRIANGLE, will be displayed. Should the three lengths be valid, the following will be determined: if the resultant triangle is EQUILATERAL (3 sides equal) or ISOSCELLES (any 2 sides equal) or SCALENE (no sides equal)  and then if the triangle is as well RIGHT (a right angle exists--equal to 90°) or ACUTE (largest angle is acute--less than 90°) or OBTUSE (largest angle is obtuse--greater than 90°, less than 180°)  A similar sketch of the triangle will then be displayed.				
<b>User Benefits:</b> Displays the power of decision-making built into the TI-59. A useful educational tool for producing various triangles and learning their attributes.				
Category Number	92	Required Progs.	--	Prog. Steps 614
			PC-100A Needed	<input checked="" type="checkbox"/>
			Library Module ID	<input type="checkbox"/>
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<b>Submission Checklist</b> <input checked="" type="checkbox"/> Recorded Magnetic Cards <input checked="" type="checkbox"/> Submission Abstract <input checked="" type="checkbox"/> Program Description <input checked="" type="checkbox"/> User Instructions <input checked="" type="checkbox"/> Sample Problem <input checked="" type="checkbox"/> Listing <input checked="" type="checkbox"/> I.D. NUMBER <input type="checkbox"/>			Signature <u>Richard C. Milne Jr.</u> Date <u>12/20/82</u> Name <u>Richard C. Milne Jr.</u> 930977 Address <u>Plymouth County Engr. Office, Courthouse</u> City <u>Le Mars</u> State <u>Iowa</u> Zip <u>51031</u>	

## IMPORTANT

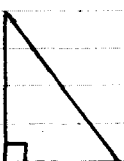






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## Program Description

<b>Program Title:</b> TRI	<b>Rev.</b> A
<b>Method, Equations, Sketches, Limitations, References, Error Recovery:</b>	
<p>If the longest side is known, you can tell if it is right, acute or obtuse. If the longest side squared is equal to the SUM of the SQUARES of the remaining two sides, you have a right triangle, if the square of the longest side is GREATER than the SUM of the SQUARES of the smaller sides, the triangle is obtuse. If the square of the longest side is LESS than the SUM of the SQUARES of the smaller sides, you have an acute triangle. Every triangle will have one of these attributes unless it is not valid.</p> <p>A triangle that is not valid will have one of the following attributes:</p> <ol style="list-style-type: none"> <li>1. Any negative lengths</li> <li>2. Any lengths equal to zero</li> <li>3. The sum of the two smaller sides of a scalene triangle is less than or equal to the longest side.</li> </ol>	
<b>Sketches of various triangles:</b>	
<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">   <b>SCALED RIGHT</b> </div> <div style="text-align: center;">   <b>SCALED OBTUSE</b> </div> <div style="text-align: center;">   <b>SCALED ACUTE</b> </div> <div style="text-align: center;">   <b>ISOSCELES OBTUSE</b> </div> <div style="text-align: center;">   <b>ISOSCELES ACUTE</b> </div> <div style="text-align: center;">   <b>ISOSCELES RIGHT</b> </div> <div style="text-align: center;">   <b>EQUILATERAL ACUTE</b> </div> </div>	
All input errors are recovered by simply reentering that particular side in error.	
<b>REFERENCE:</b> PPX Exchange, September/October, 1982 issue, Vol. 6 Number 5 Article: "Keeping It Simple" Subject: Sorting numbers sequentially by the "bubble sort" method.	
<b>REFERENCE:</b> Westmar College Le Mars, Iowa Subject: Computer Science Class Problem Instructor: Joel Rushakoff	
<b>LIMITATIONS:</b> Due to rounding errors with any side(s) having two-place decimal fractions, a possible RIGHT triangle may be evaluated as ACUTE or OBTUSE. This problem is eliminated by carrying the fraction of one side, to three significant places.	



Program Title					TRI				
A= side		B= side		C= side				E= begin	
Partition (OP 17)   Parentheses Levels									
639 . 39						t Register		<input checked="" type="checkbox"/>	
Angular Mode (if applicable)				SBR Levels		Absolute Addresses		<input type="checkbox"/>	
Library Module ID						Disturbs Pending Operations		<input type="checkbox"/>	

USER DEFINED KEYS	
A	side 1
B	side 2
C	side 3
D	
E	begin evaluation
A'	used
B'	used
C'	used
D'	
E'	

DATA REGISTERS	
0	Sorting storage
1	Sorting storage
2	Sorting storage
3	Sorting storage
4	Side A
5	Side B
6	Side C
PERMANENT	
7	
DATA STORAGE BELOW	
8	
9	Bank 3 & Bank 4
10	2436323615
11	1727271736
12	17
13	3441242713
14	3717351327
15	36151327
16	1731170000
17	352422
18	2337000000
19	131541
20	3717000000
21	321437
22	4136170000
23	3132370013
24	42132724
25	1600373524
26	1331222717
27	6565000000
28	6565656500
29	6565656565
30	6500000000
31	6565650000
32	6565
33	656565
34	65656565
35	6500

FLAGS	0 ✓	1 ✓	2 ✓	3 ✓	4 ✓	5 ✓	6 ✓	7	8	9
-------	-----	-----	-----	-----	-----	-----	-----	---	---	---

STEP	PROCEDURE	ENTER	PRESS	OUTPUT/MODE (see legend below)
1.	Input triangle leg length (1st)	side 1	A	(n)*
2.	Input triangle leg length (2nd)	side 2	B	(n)*
3.	Input triangle leg length (3rd)	side 3	C	(n)*
4.	Begin evaluation of the three sides.		E	(n)* NOT A VALID TRIANGLE or
				(n)* SCALENE RIGHT or
				(n)* ISOSCELLES RIGHT or
				(n)* SCALENE OBTUSE or
				(n)* SCALENE ACUTE or
				(n)* ISOSCELLES OBTUSE or
				(n)* ISOSCELLES ACUTE or
				(n)* EQUILATERAL ACUTE
	Note: Repeat steps 1 thru 4 as often as necessary.			
				Modes: n* — Printed only (n) — Displayed briefly (Pause (n)* — Printed and displayed

☐ See Continuation Sheet



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## Sample Problem

### Statement of Example

The following 3 pages will display 11 different possibilities that may be encountered when using this program.

**See Continuation Sheet**

ENTER	PRESS	OUTPUT/MODE (see legend below)	COMMENT
6	A	6 A (n)*	
10	B	10 B (n)*	
8	C	8 C (n)*	
	E	SCALENE RIGHT	
		I III IIII IIII I IIII II	
2803	A	2803 A (n)*	
2000	B	2000 B (n)*	
1000	C	1000 C (n)*	
	E	SCALENE OBTUSE	
		I III IIII IIII I	

Modes: n\* — Printed only (n) — Displayed Briefly (Pause)  
(n)\* — Printed and displayed

☒ Cont.

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Exchange  
Sample Problem (cont'd)

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ENTER	PRESS	OUTPUT/MODE (see legend below)	COMMENT
3	A	3 A (n)*	
1	B	1 B (n)*	
2	C	2 C (n)*	
	E	NOT A VALID TRIANGLE	
22	A	22 A (n)*	
10	B	10 B (n)*	
20	C	20 C (n)*	
	E	SCALENE ACUTE +      	
152.3	A	152.3 A (n)*	
152.3	C	152.3 C (n)*	
300	B	300 B (n)*	
	E	ISOSCELLES OBTUSE +      	
-450	A	-450 A (n)*	
450	B	450 B (n)*	
1.3	C	1.3 C (n)*	
	E	NOT A VALID TRIANGLE	
450	A	450 A (n)*	
450	B	450 B (n)*	
1.3	C	1.3 C (n)*	
	E	ISOSCELLES ACUTE +                   	
20	A	20 A (n)*	
70	B	70 B (n)*	
50	C	50 C (n)*	
	E	NOT A VALID TRIANGLE	
Modes: n* — Printed only (n) — Displayed Briefly (Pause) (n)* — Printed and displayed			

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Exchange  
Sample Problem (cont'd)

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ENTER	PRESS	OUTPUT/MODE (see legend below)			COMMENT
1	A	1	A	(n)*	
1	B	1	B	(n)*	
0	C	0	C	(n)*	
	E	NOT A VALID TRIANGLE			
1	A	1	A	(n)*	
1	B	1	B	(n)*	
1	C	1	C	(n)*	
	E	EQUILATERAL ACUTE			
10	A	10	A	(n)*	
10	B	10	B	(n)*	
14.14	C	14.14	C	(n)*	
	E	ISOSCELLES RIGHT			
Modes: n* — Printed only (n) — Displayed Briefly (Pause) (n)* — Printed and displayed					

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LOC	CODE	KEY	COMMENTS	LOC	CODE	KEY	COMMENTS	LOC	CODE	KEY	COMMENTS
000	76	LBL		055	76	LBL		110	45	RCL	
001	11	R		056	94	LX		111	05	RCL	
002	42	STD		057	97	DSZ		112	X+T		
003	04	04		058	00	00		113	RCL		
004	01	1		059	93	X2		114	04	04	
005	03	3		060	87	IFF		115	50	EQ	
006	69	DP		061	00	00		116	X+T		
007	04	04		062	91	R/S		117	RCL		
008	43	RCL		063	69	DP		118	06	06	
009	04	04		064	91	31		119	X+T		
010	69	DP		065	43	RCL		120	RCL		
011	06	06		066	01	01		121	04	04	
012	91	R/S		067	42	STD		122	50	EQ	
013	76	LBL		068	00	00		123	RCL		
014	12	B		069	43	RCL		124	04	04	
015	42	STD		070	03	03		125	05	05	
016	05	05		071	61	GTB		126	50	EQ	
017	01	1		072	00	00		127	04	04	
018	04	4		073	43	43		128	50	EQ	
019	69	DP		074	76	LBL		129	04	04	
020	04	04		075	93	X2		130	76	LBL	
021	43	RCL		076	93	X+T		131	04	04	
022	05	05		077	69	DP		132	04	04	
023	69	DP		078	93	2*		133	05	05	
024	06	06		079	76	RC*		134	04	04	
025	91	R/S		080	02	02		135	04	04	
026	76	LBL		081	77	GE		136	04	04	
027	13	C		082	74	LX		137	50	EQ	
028	42	STD		083	93	DP		138	04	04	
029	06	06		084	93	3*		139	04	04	
030	01	1		085	93	X2		140	05	05	
031	05	5		086	93	03		141	05	05	
032	69	DP		087	93	DP		142	05	05	
033	04	04		088	93	3*		143	05	05	
034	43	RCL		089	93	3*		144	05	05	
035	06	06		090	93	3*		145	05	05	
036	91	R/S		091	93	3*		146	05	05	
037	76	LBL		092	93	3*		147	05	05	
038	13	C		093	93	3*		148	05	05	
039	42	STD		094	93	3*		149	05	05	
040	06	06		095	93	3*		150	05	05	
041	01	1		096	93	3*		151	05	05	
042	03	3		097	93	3*		152	05	05	
043	43	RCL		098	93	3*		153	05	05	
044	06	06		099	93	3*		154	05	05	
045	91	R/S		100	93	3*		155	05	05	
046	76	LBL		101	93	3*		156	05	05	
047	13	C		102	93	3*		157	05	05	
048	42	STD		103	93	3*		158	05	05	
049	06	06		104	93	3*		159	05	05	
050	03	3		105	93	3*		160	05	05	
051	76	RC*		106	93	3*					
052	03	03		107	93	3*					
053	93	STD		108	93	3*					
054	00	00		109	93	3*					

## MERGED CODES

62	Page	ind	83	GTB	ind
63	Loc	ind	84	Up	ind
64	---	ind	92	INV	SBR

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LOC	CODE	KEY	COMMENTS	LOC	CODE	KEY	COMMENTS	LOC	CODE	KEY	COMMENTS
161	69	DP		216	43	RCL		271	43	RCL	
162	00	00		217	06	06		272	26	26	
163	43	RCL		218	33	X²		273	69	DP	
164	12	12		219	55	+		274	04	04	
165	69	DP		220	01	1		275	69	DP	
166	01	01		221	00	0		276	05	05	
167	43	RCL		222	45	YX		277	61	GTO	
168	13	13		223	01	1		278	95	=	
169	69	DP		224	00	0		279	76	LBL	
170	02	02		225	95	=		280	14	A'	
171	43	RCL		226	52	EE		281	86	STF	
172	14	14		227	22	INV		282	04	04	
173	69	DP		228	52	EE		283	69	DP	
174	03	03		229	67	EQ		284	00	00	
175	69	DP		230	16	A'		285	43	RCL	
176	05	05		231	22	INV		286	17	17	
177	61	GTO		232	77	GE		287	69	DP	
178	52	EE		233	17	B'		288	02	02	
179	76	LBL		234	18	C'		289	43	RCL	
180	42	STO		235	76	LBL		290	18	18	
181	86	STF		236	24	CE		291	69	DP	
182	01	01		237	29	CP		292	03	03	
183	69	DP		238	67	EQ		293	69	DP	
184	00	00		239	25	CLR		294	05	05	
185	43	RCL		240	22	INV		295	61	GTO	
186	15	15		241	77	GE		296	13	.	
187	69	DP		242	25	CLR		297	76	LBL	
188	02	02		243	43	RCL		298	17	B'	
189	43	RCL		244	04	04		299	86	STF	
190	16	16		245	85	+		300	03	03	
191	69	DP		246	43	RCL		301	69	DP	
192	03	03		247	05	05		302	00	00	
193	69	DP		248	95	=		303	43	RCL	
194	05	05		249	32	X1T		304	19	19	
195	76	LBL		250	43	RCL		305	69	DP	
196	52	EE		251	06	06		306	02	02	
197	43	RCL		252	77	GE		307	43	RCL	
198	04	04		253	25	CLR		308	20	20	
199	33	X²		254	92	RTN		309	69	DP	
200	85	+		255	76	LBL		310	03	03	
201	43	RCL		256	25	CLR		311	69	DP	
202	05	05		257	69	DP		312	05	05	
203	33	X²		258	00	00		313	61	GTO	
204	95	=		259	43	RCL		314	93	.	
205	55	+		260	23	23		315	76	LBL	
206	01	1		261	69	DP		316	18	C'	
207	00	0		262	01	01		317	86	STF	
208	45	YX		263	43	RCL		318	02	02	
209	01	1		264	24	24		319	69	DP	
210	00	0		265	69	DP		320	00	00	
211	95	=		266	02	02		321	43	RCL	
212	52	EE		267	43	RCL					
213	22	INV		268	25	25					
214	52	EE		269	69	DP					
215	32	X1T		270	03	03					

## MERGED CODES

62	Pgm	Ind	72	STO	Ind	83	GTO	Ind
63	Trg	Ind	73	RCL	Ind	84	GO	Ind
64	Trg	Ind	74	SUM	Ind	92	INV	SBR



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LOC	CODE	KEY	COMMENTS	LOC	CODE	KEY	COMMENTS	LOC	CODE	KEY	COMMENTS
322	21	21		377	69	DP		432	05	05	
323	69	DP		378	02	02		433	43	RCL	
324	02	02		379	43	RCL		434	33	33	
325	43	RCL		380	30	30		435	69	DP	
326	22	22		381	69	DP		436	02	02	
327	69	DP		382	03	03		437	43	RCL	
328	03	03		383	69	DP		438	28	28	
329	69	DP		384	05	05		439	69	DP	
330	05	05		385	43	RCL		440	03	03	
331	76	LBL		386	33	33		441	69	DP	
332	93	.		387	69	DP		442	05	05	
333	29	CP		388	02	02		443	61	GTO	
334	69	DP		389	43	RCL		444	95	=	
335	00	00		390	27	27		445	76	LBL	
336	87	IFF		391	69	DP		446	87	IFF	
337	01	01		392	03	03		447	43	RCL	
338	68	NDP		393	69	DP		448	35	35	
339	87	IFF		394	05	05		449	69	DP	
340	05	05		395	43	RCL		450	02	02	
341	69	DP		396	34	34		451	69	DP	
342	87	IFF		397	69	DP		452	05	05	
343	06	06		398	02	02		453	43	RCL	
344	79	X		399	43	RCL		454	33	33	
345	76	LBL		400	31	31		455	69	DP	
346	68	NDP		401	69	DP		456	02	02	
347	87	IFF		402	03	03		457	43	RCL	
348	02	02		403	69	DP		458	30	30	
349	88	DMS		404	05	05		459	69	DP	
350	87	IFF		405	61	GTO		460	03	03	
351	03	03		406	95	=		461	69	DP	
352	87	IFF		407	76	LBL		462	05	05	
353	87	IFF		408	88	DMS		463	43	RCL	
354	04	04		409	06	6		464	34	34	
355	77	GE		410	05	5		465	69	DP	
356	76	LBL		411	69	DP		466	02	02	
357	69	DP		412	01	01		467	43	RCL	
358	87	IFF		413	69	DP		468	31	31	
359	02	02		414	05	05		469	69	DP	
360	78	Σ+		415	69	DP		470	03	03	
361	87	IFF		416	00	00		471	69	DP	
362	03	03		417	43	RCL		472	05	05	
363	89	4		418	31	31		473	61	GTO	
364	87	IFF		419	69	DP		474	95	=	
365	04	04		420	02	02		475	76	LBL	
366	77	GE		421	69	DP		476	77	GE	
367	76	LBL		422	05	05		477	06	6	
368	79	X		423	43	RCL		478	05	5	
369	06	6		424	34	34		479	69	DP	
370	05	5		425	69	DP		480	01	01	
371	69	DP		426	02	02		481	69	DP	
372	02	02		427	43	RCL		482	5	05	
373	69	DP		428	30	30					
374	05	05		429	69	DP					
375	43	RCL		430	03	03					
376	32	32		431	69	DP					

## MERGED CODES

62	Pem	Ind	72	STO	Ind	83	GTO	Ind
63	Trc	Ind	73	RCL	Ind	84	Op	Ind
64	Plg	Ind	74	SUM	Ind	92	INV	SBR

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LOC	CODE	KEY	COMMENTS	LOC	CODE	KEY	COMMENTS	LOC	CODE	KEY	COMMENTS
483	+	27	ROL	593	2	3	INV	593	2	3	INV
484	+	27	27	594	3	3	STF	594	3	3	STF
485	+	27	27	595	0	1	01	595	0	1	01
486	+	27	27	596	2	3	INV	596	2	3	INV
487	+	27	27	597	3	3	STF	597	3	3	STF
488	+	27	27	598	0	2	02	598	0	2	02
489	+	27	27	599	2	3	INV	599	2	3	INV
490	+	27	27	600	3	3	STF	600	3	3	STF
491	+	27	27	601	0	3	03	601	0	3	03
492	+	27	27	602	2	3	INV	602	2	3	INV
493	+	27	27	603	3	3	STF	603	3	3	STF
494	+	27	27	604	0	4	04	604	0	4	04
495	+	27	27	605	2	3	INV	605	2	3	INV
496	+	27	27	606	3	3	STF	606	3	3	STF
497	+	27	27	607	0	5	05	607	0	5	05
498	+	27	27	608	2	3	INV	608	2	3	INV
499	+	27	27	609	3	3	STF	609	3	3	STF
500	+	27	27	610	0	6	06	610	0	6	06
501	+	27	27	611	2	3	INV	611	2	3	INV
502	+	27	27	612	3	3	STF	612	3	3	STF
503	+	27	27	613	0	7	07	613	0	7	07
504	+	27	27	614	2	3	INV	614	2	3	INV
505	+	27	27	615	3	3	STF	615	3	3	STF
506	+	27	27	616	0	8	08	616	0	8	08
507	+	27	27	617	2	3	INV	617	2	3	INV
508	+	27	27	618	3	3	STF	618	3	3	STF
509	+	27	27	619	0	9	09	619	0	9	09
510	+	27	27	620	2	3	INV	620	2	3	INV
511	+	27	27	621	3	3	STF	621	3	3	STF
512	+	27	27	622	0	0	00	622	0	0	00
513	+	27	27	623	2	3	INV	623	2	3	INV
514	+	27	27	624	3	3	STF	624	3	3	STF
515	+	27	27	625	0	1	01	625	0	1	01
516	+	27	27	626	2	3	INV	626	2	3	INV
517	+	27	27	627	3	3	STF	627	3	3	STF
518	+	27	27	628	0	2	02	628	0	2	02
519	+	27	27	629	2	3	INV	629	2	3	INV
520	+	27	27	630	3	3	STF	630	3	3	STF
521	+	27	27	631	0	3	03	631	0	3	03
522	+	27	27	632	2	3	INV	632	2	3	INV
523	+	27	27	633	3	3	STF	633	3	3	STF
524	+	27	27	634	0	4	04	634	0	4	04
525	+	27	27	635	2	3	INV	635	2	3	INV
526	+	27	27	636	3	3	STF	636	3	3	STF
527	+	27	27	637	0	5	05	637	0	5	05
528	+	27	27	638	2	3	INV	638	2	3	INV
529	+	27	27	639	3	3	STF	639	3	3	STF
530	+	27	27	640	0	6	06	640	0	6	06
531	+	27	27	641	2	3	INV	641	2	3	INV
532	+	27	27	642	3	3	STF	642	3	3	STF
533	+	27	27	643	0	7	07	643	0	7	07
534	+	27	27	644	2	3	INV	644	2	3	INV
535	+	27	27	645	3	3	STF	645	3	3	STF
536	+	27	27	646	0	8	08	646	0	8	08
537	+	27	27	647	2	3	INV	647	2	3	INV
538	+	27	27	648	3	3	STF	648	3	3	STF
539	+	27	27	649	0	9	09	649	0	9	09
540	+	27	27	650	2	3	INV	650	2	3	INV
541	+	27	27	651	3	3	STF	651	3	3	STF
542	+	27	27	652	0	0	00	652	0	0	00
543	+	27	27	653	2	3	INV	653	2	3	INV
544	+	27	27	654	3	3	STF	654	3	3	STF
545	+	27	27	655	0	1	01	655	0	1	01
546	+	27	27	656	2	3	INV	656	2	3	INV
547	+	27	27	657	3	3	STF	657	3	3	STF
548	+	27	27	658	0	2	02	658	0	2	02
549	+	27	27	659	2	3	INV	659	2	3	INV
550	+	27	27	660	3	3	STF	660	3	3	STF
551	+	27	27	661	0	3	03	661	0	3	03
552	+	27	27	662	2	3	INV	662	2	3	INV
553	+	27	27	663	3	3	STF	663	3	3	STF
554	+	27	27	664	0	4	04	664	0	4	04
555	+	27	27	665	2	3	INV	665	2	3	INV
556	+	27	27	666	3	3	STF	666	3	3	STF
557	+	27	27	667	0	5	05	667	0	5	05
558	+	27	27	668	2	3	INV	668	2	3	INV
559	+	27	27	669	3	3	STF	669	3	3	STF
560	+	27	27	670	0	6	06	670	0	6	06
561	+	27	27	671	2	3	INV	671	2	3	INV
562	+	27	27	672	3	3	STF	672	3	3	STF
563	+	27	27	673	0	7	07	673	0	7	07
564	+	27	27	674	2	3	INV	674	2	3	INV
565	+	27	27	675	3	3	STF	675	3	3	STF
566	+	27	27	676	0	8	08	676	0	8	08
567	+	27	27	677	2	3	INV	677	2	3	INV
568	+	27	27	678	3	3	STF	678	3	3	STF
569	+	27	27	679	0	9	09	679	0	9	09
570	+	27	27	680	2	3	INV	680	2	3	INV
571	+	27	27	681	3	3	STF	681	3	3	STF
572	+	27	27	682	0	0	00	682	0	0	00
573	+	27	27	683	2	3	INV	683	2	3	INV
574	+	27	27	684	3	3	STF	684	3	3	STF
575	+	27	27	685	0	1	01	685	0	1	01
576	+	27	27	686	2	3	INV	686	2	3	INV
577	+	27	27	687	3	3	STF	687	3	3	STF
578	+	27	27	688	0	2	02	688	0	2	02
579	+	27	27	689	2	3	INV	689	2	3	INV
580	+	27	27	690	3	3	STF	690	3	3	STF
581	+	27	27	691	0	3	03	691	0	3	03
582	+	27	27	692	2	3	INV	692	2	3	INV
583	+	27	27	693	3	3	STF	693	3	3	STF
584	+	27	27	694	0	4	04	694	0	4	04
585	+	27	27	695	2	3	INV	695	2	3	INV
586	+	27	27	696	3	3	STF	696	3	3	STF
587	+	27	27	697	0	5	05	697	0	5	05
588	+	27	27	698	2	3	INV	698	2	3	INV
589	+	27	27	699	3	3	STF	699	3	3	STF
590	+	27	27	700	0	6	06	700	0	6	06
591	+	27	27	701	2	3	INV	701	2	3	INV
592	+	27	27	702	3	3	STF	702	3	3	STF
593	+	27	27	703	0	7	07	703	0	7	07
594	+	27	27	704	2	3	INV	704	2	3	INV
595	+	27	27	705	3	3	STF	705	3	3	STF
596	+	27	27	706	0	8	08	706	0	8	08
597	+	27	27	707	2	3	INV	707	2	3	INV
598	+	27	27	708	3	3	STF	708	3	3	STF
599	+	27	27	709	0	9	09	709	0	9	09
600	+	27	27	710	2	3	INV	710	2	3	INV
601	+	27	27	711	3	3	STF	711	3	3	STF
602	+	27	27	712	0	0	00	712	0	0	00
603	+	27	27	713	2	3	INV	713	2	3	INV
604	+	27	27	714	3	3	STF	714	3	3	STF
605	+	27	27	715	0	1	01	715	0	1	01
606	+	27	27	716	2	3	INV	716	2	3	INV
607	+	27	27	717	3	3	STF	717	3	3	STF
608	+	27	27	718	0	2	02	718	0	2	02
609	+	27	27	719	2	3	INV	719	2	3	INV
610	+	27	27	720	3	3	STF	720	3	3	STF
611	+	27	27	721	0	3	03	721	0	3	03
612	+	27	27	722	2	3	INV	722	2	3	INV
613	+	27	27	723	3	3	STF	723	3	3	STF
614	+	27	27	724	0	4	04	724	0	4	04
615	+	27	27	725	2	3	INV	725	2	3	INV
616	+	27	27	726	3	3	STF	726	3	3	STF
617	+	27	27	727	0	5	05	727	0	5	05
618	+	27	27	728	2	3	INV	728	2	3	INV
619	+	27	27	729	3	3	STF	729	3	3	STF
620	+	27	27	730	0	6	06	730	0	6	06
621	+	27	27	731	2	3	INV	731	2	3	INV
622	+	27	27	732	3	3	STF	732	3	3	STF
623	+	27	27	733	0	7	07	733	0	7	07
624	+	27	27	734	2	3	INV	734	2	3	INV
625	+	27	27	7							