Table 10: s=49

Table 10: Primitive Pythagaorean Triples (PPT) with s=49

•	• PPT	r	$r^2/2$	s	t	s+t $\sqrt{W}$	$(s+t)^2$ W	$(s^2 + t^2)$ U	c	U/c p	*next c	*next p	*next t
•	**16-63-65**	14	98	2	49	51	2601	2405	65	37	289	65	128
•	**36-77-85**	28	392	8	49	57	3249	2465	85	29	337	85	162
•	**60-91-109**	42	882	18	49	67	4489	2725	109	25	389	109	200
•	**88-105-137**	56	1568	32	49	57	6561	3425	137	25	445	137	242
•	**119-120-169**	70	2450	49	50	99	9801	4901	169	29	505	169	288
•	**133-156-205**	84	3528	49	72	121	14641	7585	205	37	569	205	338
	147-196-245	98	4802	49	98	147	21609	12005	245	49			
•	**161-240-289**	112	6272	49	128	177	31329	18785	289	65	709	289	450
•	**175-288-337**	126	7938	49	162	211	44521	28645	337	85	785	337	512
•	**189-340-389**	140	9800	49	200	249	62001	42401	389	109	865	389	578
•	**203-396-445**	154	11858	49	242	291	84681	60965	445	137	949	445	648
•	**217-456-505**	168	14112	49	288	337	113569	85345	505	169	1037	505	722
Δ	**a=Δ14 b=c=Δ4X_n**	Δ14	Δ49X_n		2$(X_n)^2$all	Δ8X_n=Δ2a			Δ4X_n	Δ4X_n	Δ4X_n	Δ4X_n	2$(X_n)^2$
	n=5,6,7,…		n=6,10,14 …		n=3,5,7…	n=(1),2,3…			n=5,6,7…	n=2,3,4…	n12,13,14 …	n=5,6.7…	n=8,9,10,…
Δ=difference		**a_p= previous**		**a= current**		**a_n= next**							

Summary——>

Every **s=49** PPT can be generated from the initial **3-4-5** PPT. Switching the "*s*" & "*t*" pair-sets gives the **s=2,8,18,32**,… EVEN PPTs and from the **s=2**, the ODD **s=9,25,49,81**,… can be generated the same way. ALL PPTs are related back to the **3-4-5** PPT! Disregard the grayed out rows of **s=2,8,18 &32** and all non-Primitive Pythagorean Triples (nPPT) except for the **r** and **r²/2** columns as they are shown to show how the specific **s=49** pattern is formed. Refer to **Table 3** (**s=2**) to see how the **s=49** PPTs are a derivative. Notice that the spacing between subsequent PPTs now skips not to the next PPT but to the fifth one thereafter, i.e. every sixth one. If "c"=169, it's "**p**" value skips past the very next PPT to the fifth thereafter, e.i. to the "c"=505 row. This is a consistent pattern for all **s=49**. While **s=2** pointed to the next PPT row, **s=49** points to the sixth next PPT row! As all subsequently larger **s-sets** will show, each has a similar skip pattern that is a consistent multiplier for that given **s-set**!

Another key pattern is that the "**t**" values for all PPTs follow a (**2,8,18,32),50**,**72**,98,**128**,**162**,**200**,**242** sequence (in **BOLD**) that when divided by 2 gives the (**1,4,9,16),25**,**36**,49,**64**,**81**,**100**,**121** (in **BOLD**) sequence — like that of the PD — skipping all those divisible by 49. An EVEN + ODD or ODD + EVEN pattern for "**a,b**" and "**a²,b²**" and "**s,t**" values holds true. Patterns described typically begin with the first **s=49** PPT row. Some pattern values also run through the other nPPT and/or **s≠49** rows.

Notice the **s=49** pattern for PPTs runs **2** (BLUE)-1-**5** (BLUE),… .