Table 5: s=8

Table 5: Primitive Pythagaorean Triples (PPT) with s=8

•	• 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
•	**5-12-13**	4	8	1	8	9	81	65	13	5			
	12-16-20	8	32	4	8	12	144	80	20	4			
•	**20-21-29**	12	72	8	9	17	239	145	29	5	85	29	49
	24-32-40	16	128	8	16	24	576	320	40	8			
•	**28-45-53**	20	200	8	25	33	1089	689	53	13	125	53	81
	32-60-68	24	288	8	36	44	1296	1360	68	20			
•	**36-77-85**	28	392	8	49	57	2401	2465	85	29	173	85	121
	40-96-104	32	512	8	64	72	4096	4160	104	40			
•	**44-117-125**	36	648	8	81	89	6561	6625	125	53	229	125	169
	48-140-148	40	800	8	100	108	10,000	10064	148	68			
•	**52-165-173**	44	968	8	121	129	16641	14705	173	85	293	173	225
	56-192-200	48	1152	8	144	152	20736	20800	200	104			
•	**60-221-229**	52	1352	8	169	177	28561	28625	229	125	365	229	289
	64-252-260	56	1568	8	196	204	38416	38480	260	148			
•	**68-285-293**	60	1800	8	225	233	50625	50689	293	173	445	293	361
	72-320-328	64	2048	8	256	264	65536	65600	328	200			
•	**76-357-365**	68	2312	8	289	297	83521	83585	365	229	533	365	441
	80-396-404	72	2592	8	324	332	104976	105040	404	260			
Δ	• **a=Δ8** **[a (all)=Δ4]** **b=c=$\Delta 8X_n$**	Δ8 [a (all)=Δ4]	$\Delta 8X_n$		$\Delta 8X_n$ $t=3^2,5^2,7^2$, …	$\Delta 8X_n$			$\Delta 8X_n$	$\Delta 8X_n$	$\Delta 8X_n$	$\Delta 8X_n$	$\Delta 8X_n$ $t=7^2,9^2,11^2$, …
	n=3,4,5,…		**n=16,24,32** **…**		**n=2,3,4…**	**n=2,3,4…**			**n=3,4,5,…**	**n=1,2,3,…**	**n=5,6,7,…**	**n=3,4,5,…**	**n=4,5,6,…**

Δ=difference PPTs s=8 — **a_p= previous** **a= current** **a_n= next**

Summary——>

Every **s=8** 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=1& 4** 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=8** pattern is formed. Refer to **Table 3** (**s=2**) to see how the **s=8** PPTs are a derivative. Notice that the spacing between subsequent PPTs now skips not to the next PPT but to the one thereafter, i.e. every other one. If "c"=53, it's "**p**" value skips past the very next PPT to the one thereafter, e.i. to the "c"=125 row. This is a consistent pattern for all **s=8**. While **s=2** pointed to the next PPT row, **s=8** points to the second next 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 **1**,4,**9**,16,**25**,36,**49**,64,**81**,100 (in **BOLD**) sequence — like that of the PD — skipping all the EVENS, those divisible by 4. 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=8** PPT row. Some pattern values also run through the other nPPT and/or **s≠8** rows. Notice the **s=8** pattern for PPTs runs **1** (BLUE)-1-**1** (BLUE)-1-**1** (BLUE),…