Case 5 :
When
$m_2(m_1-m_2)/2$ = 2731 (four digit Wagstaff Prime number)

m_2	m_1-m_2	m_1	$r = m_1^2 - m_2^2$	$s= 2m_1m_2$	$t = m_1^2 + m_2^2$	A_1	P_1	A_1/P_1
1	5462	5463	29844368	10926	29844370	163039782384	59699664	2731
2	2731	2733	7469285	10932	7469293	40827111810	14949510	2731
2731	2	2733	10928	14927646	14927650	81564657744	29866224	2731
5462	1	5463	10925	59677812	59677813	325990048050	119366550	2731

Table 5

Case 6 :
When
$m_2(m_1-m_2)/2$ = 43691 (five digit Wagstaff Prime number)

m_2	m_1-m_2	m_1	$r = m_1^2 - m_2^2$	$s= 2m_1m_2$	$t = m_1^2 + m_2^2$	A_1	P_1	A_1/P_1
1	87382	87383	7635788688	174766	7635788690	667238122923504	15271752144	43691
2	43691	43693	1909078245	174772	1909078253	166826711517570	3818331270	43691
43691	2	43693	174768	3817981726	3817981730	333630515144784	7636138224	43691
87382	1	87383	174765	15271402612	15271402613	1334453338743090	30542979990	43691

Table 6

Case 7 :
When
$m_2(m_1-m_2)/2$ = 174763 (six digit Wagstaff Prime number)

m_2	m_1-m_2	m_1	$r = m_1^2 - m_2^2$	$s= 2m_1m_2$	$t = m_1^2 + m_2^2$	A_1	P_1	A_1/P_1
1	349526	349527	122169123728	699054	122169123730	42701407309276700	244338946512	174763
2	174763	174765	30542805221	699060	30542805229	10675626708896100	61086309510	174763
174763	2	174765	699056	61084911390	61084911394	21350886908323900	122170521840	174763
349526	1	349527	699053	244337548404	244337548405	85402448112230700	488675795862	174763

Table 7

5. OBSERVATIONS

1. There are 4 Pythogorean triangle for all the above 7 cases, out of which 2 triangles areprimitive and the remaining 2 triangles are non- primitive.
2. ¼ (r+s-t) is a wagstaff prime number.
3. Out of 4 triangles in all the cases, $t - r$ is a even prime for one non-primitive triangle and cubic number for primitive triangle.
4. For the Wagstaff prime number 3, $2(r + s - t)$ = Nasty number.
5. In all the cases, the sides s, t are consecutive for one of the primitive triangles.
6. s+t , 2(t-r) are perfect squares.

6. CONCLUSION

In this work, generation of Pythagoren Triangles with Area/Perimeter as a Wagstaff prime number and entralling observations are shown. Further, One may find the PythagorenTriangles for any other number pattern.

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