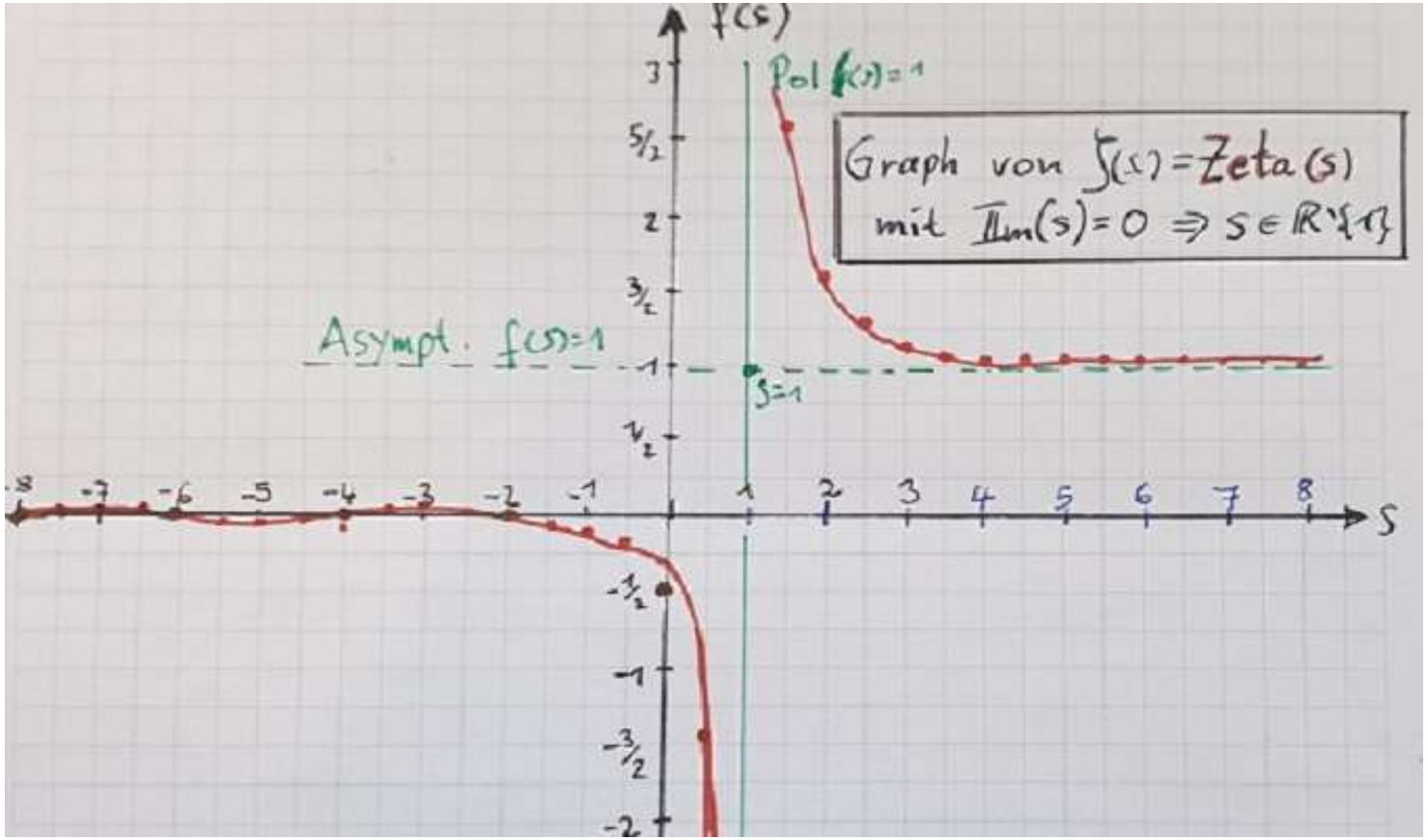
Summary of Results: Graph of Riem. Zeta(s) Fct. with Im(s)=0

As a summary and final result of the work done in the Jupyther Notebook "*RiemannZetaFct_and_RiemannHypothesis.ipynb"*
*(*see https://github.com/HVoellinger/Mathematics) we show the graph of zeta(s) where Im(s)=0, s.t. s=real number (without s=1).
We use the calculated values of zeta(s) for this special s and summaries them in a small table (see below). we see a pole of zeta(s) at s=1 and an asymtote at f(s)=1 for s>1. Compare also the remarks about the lim(zeta(s)) for s goes to positive infinity: lim(s->+inf)](zeta(s))=1.

s	Calculation of zetas(s) with (cRZ) Rounding errors may occur in proc. (cRZ)	Exact result: zeta(s) with (RFE) or with WolframAlpha tool
-8	zeta(-8) = 1.3859169880942308e-05	0
-7,5	zeta(-15/2) = 0.003274799574186712	
-7	zeta(-7) = 0.004167422013553654	1/240 = 0.0041666... -> Rounding E.
-6,5	zeta(-13/2) = 0.0027469095530168607	
-6	zeta(-6) = 2.8347851868673592e-08	0
-5,5	zeta(-11/2) = -0.0026714542649568995	
-5	zeta(-5) = -0.003968252590985674	-1/252= 0.003968253968 -> Rounding E.
-4,5	zeta(-9/2) = -0.003091668796611392	
-4	zeta(-4) = 6.429216196053237e-11	0
-3,5	zeta(-7/2) = 0.004441011354616652	
-3	zeta(-3) = 0.008333333335927267	1/120 = 0.008333...----> Rounding E.
-2,5	zeta(-5/2) = 0.008516928778669624	
-2	zeta(-2) = 1.5603186562147366e-13	0
-1,5	zeta(-3/2) = -0.025485201889790032	
-1	zeta(-1) = -0.08333333333332381	-1/12=0.08333…---> Rounding Error
-0,5	zeta(-1/2) = -0.2078862249773517	
0	zeta(0) = -0.49999999999999906	-1/2= 0.5 -----> Rounding Error
0,5	zeta(1/2) = -1.460354508809586	
1	infinity	**Pole**
1,5	zeta(3/2) = 2.612375348685488	
2	zeta(2) = 1.6449340668482266	$Pi^2/6$=1.6449340668….
2,5	zeta(5/2) = 1.341487257250917	
3	zeta(3) = 1.2020569031595942	
3,5	zeta(7/2) = 1.1267338673170566	
4	zeta(4) = 1.0823232337111381	$(pi^2)^2/90$=1.082323232347…
4,5	zeta(9/2) = 1.0547075107614543	
5	zeta(5) = 1.03692775514337	
5,5	zeta(11/2) = 1.0252045799546856	
6	zeta(6) = 1.0173430619844488	$(pi^2)^3/945$=1.0173430619844…
6,5	zeta(13/2) = 1.0120058998885244	
7	zeta(7) = 1.0083492773819225	
7,5	zeta(15/2) = 1.0058267275365227	
8	zeta(8) = 1.0040773561979444	$((pi^2)^2)^2/9450$=1.004077356197944…

Graph of the Riem. Zeta Fct. Zeta(s) with Im(s)=0



Values of Zeta(s) with Im(s)=0

s	Zetas(s)	Remark
-8	zeta(-8) = 1.3859169880942308e-05	0
-7,5	zeta(-15/2) = 0.003274799574186712	
-7	zeta(-7) = 0.004167422013553654	1/240
-6,5	zeta(-13/2) = 0.0027469095530168607	
-6	zeta(-6) = 2.8347851868673592e-08	0
-5,5	zeta(-11/2) = -0.0026714542649568995	
-5	zeta(-5) = -0.003968252590985674	-1/252
-4,5	zeta(-9/2) = -0.003091668796611392	
-4	zeta(-4) = 6.429216196053237e-11	0
-3,5	zeta(-7/2) = 0.004441011354616652	
-3	zeta(-3) = 0.008333333335927267	1/120
-2,5	zeta(-5/2) = 0.008516928778669624	
-2	zeta(-2) = 1.5603186562147366e-13	0
-1,5	zeta(-3/2) = -0.025485201889790032	
-1	zeta(-1) = -0.08333333333332381	-1/12
-0,5	zeta(-1/2) = -0.2078862249773517	
0	zeta(0) = -0.49999999999999906	-1/2
0,5	zeta(1/2) = -1.460354508809586	
1	infinity	**Pol**
1,5	zeta(3/2) = 2.612375348685488	
2	zeta(2) = 1.6449340668482266	Pi²/6
2,5	zeta(5/2) = 1.341487257250917	
3	zeta(3) = 1.2020569031595942	
3,5	zeta(7/2) = 1.1267338673170566	
4	zeta(4) = 1.0823232337111381	(pi²)²/90
4,5	zeta(9/2) = 1.0547075107614543	
5	zeta(5) = 1.03692775514337	
5,5	zeta(11/2) = 1.0252045799546856	
6	zeta(6) = 1.0173430619844488	(pi²)³/945
6,5	zeta(13/2) = 1.0120058998885244	
7	zeta(7) = 1.0083492773819225	
7,5	zeta(15/2) = 1.0058267275365227	
8	zeta(8) = 1.0040773561979444	((pi²)²)²/9450

Graph of the Riem. Zeta Fct. Zeta(s) with Im(s)=0