

William Gann's Square of Nine by Aswini Patel

In this article we will discuss about one of the many methods of analysis William Gann used. He revealed some of his methods to be used by those patient and wise enough to study and understand them.

We will present you William Gann's Square of Nine: idea of conception, special properties and the characteristics for bull and bear market. We will then find some specific and less known geometrical and mathematical proportions between the numbers in the square. We will then look on the charts for the numbers in the square. We will discover that between a High and a Low there is a specific ratio. This ratio has an explanation and we will find its origin and use. We will end with having a powerful tool that gives us clear targets for the trend to reach.

How was William Gann?

William D. Gann was a trader of the early 20th century. His abilities for profiting from the stock and commodity markets remain unchallenged. Gann's methods of technical analysis for projecting both price and time targets are unique. Even today, his methods have yet to be fully duplicated.

Known as "The Master Trader", W.D. Gann was born in 1878, in Lufkin, Texas. Gann netted over 50 million \$ from the markets during his trading career, averaging a success rate for trades of more than 90%. It has been said that Gann could very well have been right ALL the time. Any losses incurred by him were only there by his own design and not because of any faults with his methods.

His successes are legendary. Gann literally converted small accounts into fortunes, increasing their net balances by several hundred percent. There are numerous examples of his trading successes, among which are these:

1908	–	a	\$130	account	increased	to	\$12.000	in	30	days.
1923	–	a	\$973	account	increased	to	\$30.000	in	60	days.

1933 – 479 trades were made with 422 being profitable. This is an accuracy of 88% and 4000% profit.
1946 – A 3-month net profit of \$13.000 from starting capital of \$4500 – a 400% profit.

The following paragraph appeared in the December 1909 issue of "Ticket" Magazine. It was written by R.D. Wyckoff, the former owner and editor of the "Ticket", and describes Gann's proficiency for projecting price targets forward in time:

"One of the most astonishing calculations made by Mr. Gann was during last summer (1909) when he predicted that September Wheat would sell at \$1.20. This meant that it must touch that figure before the end of the month of September. At twelve o'clock, Chicago time, on September 30th (the last day) the option was selling bellow \$1.08 and it looked as though his prediction would not be fulfilled. Mr. Gann said, 'If it does not touch \$1.20 by the close of the market, it will prove that there is something wrong with my whole method of calculations. I do not care what the price is now, it must go there'. It is common history that September Wheat surprised the whole country but selling at \$1.20 and no high in the very last hour of trading, closing at that figure".

Gann's trading methods are based on personal beliefs of a natural order existing for everything in the universe. Gann was part of a family with strong religious beliefs. As a result, Gann would often use Biblical passages as a basis for not only his life, but his trading methods. A passage often quoted by Gann was this from Ecclesiastes 1:9 – 10:

“What has been, that will be; what has been done, that will be done. Nothing is new under the sun. Even the thing of which we say, ‘See, this is new!’, has already existed in the ages that preceded us.”

This universal order of nature also existed, Gann determined, and we have the same opinion now, in the stock and commodity markets. Price movements occurred, not in a random manner, but in a manner that can be pre-determined. The predictable movements of prices result from the influence of mathematical points of forces found in nature... And what is the cause for all these points of forces? Right... cosmos..universe.. all planets around us. This Gann could say at that time.

These points of force were felt to cause prices to not only move, but move in a manner that can be anticipated. Future targets for both price and time can be confidently projected by reducing these mathematical points of forces to terms of mathematical equations and relationships.

The mathematical equations of Gann are not complex. They result in lines of support and resistance which prices invariably will follow.

Gann held that time is the most important element of trading. Time is the factor that determines the length of a commodity's price trend. When time dictates that trending prices should react, prices may stabilize for a short period, or they may fluctuate within a tight range, but eventually they will react by reversing direction. Time is the element that will determine WHEN prices should react.

Certain price reactions are found to occur during specific times. The actual TYPE of price reaction can be anticipated, and pre-determined, by using Gann time rules.

Gann time periods last not only days or weeks, but months and even years. Gann's trading year is first divided in half, equivalent to 6 months or 26 weeks. The year is then divided by eighths, and then by sixteenths. And then, after you think you understand all of this, you find that Gann's year is also divided by thirds.

There are also important time periods within the Gann year. For example, since a week is 7 days, and 7 times 7 is 49, Gann's work found that 49 is a significant number too. Important tops or bottoms may occur between the 49th and

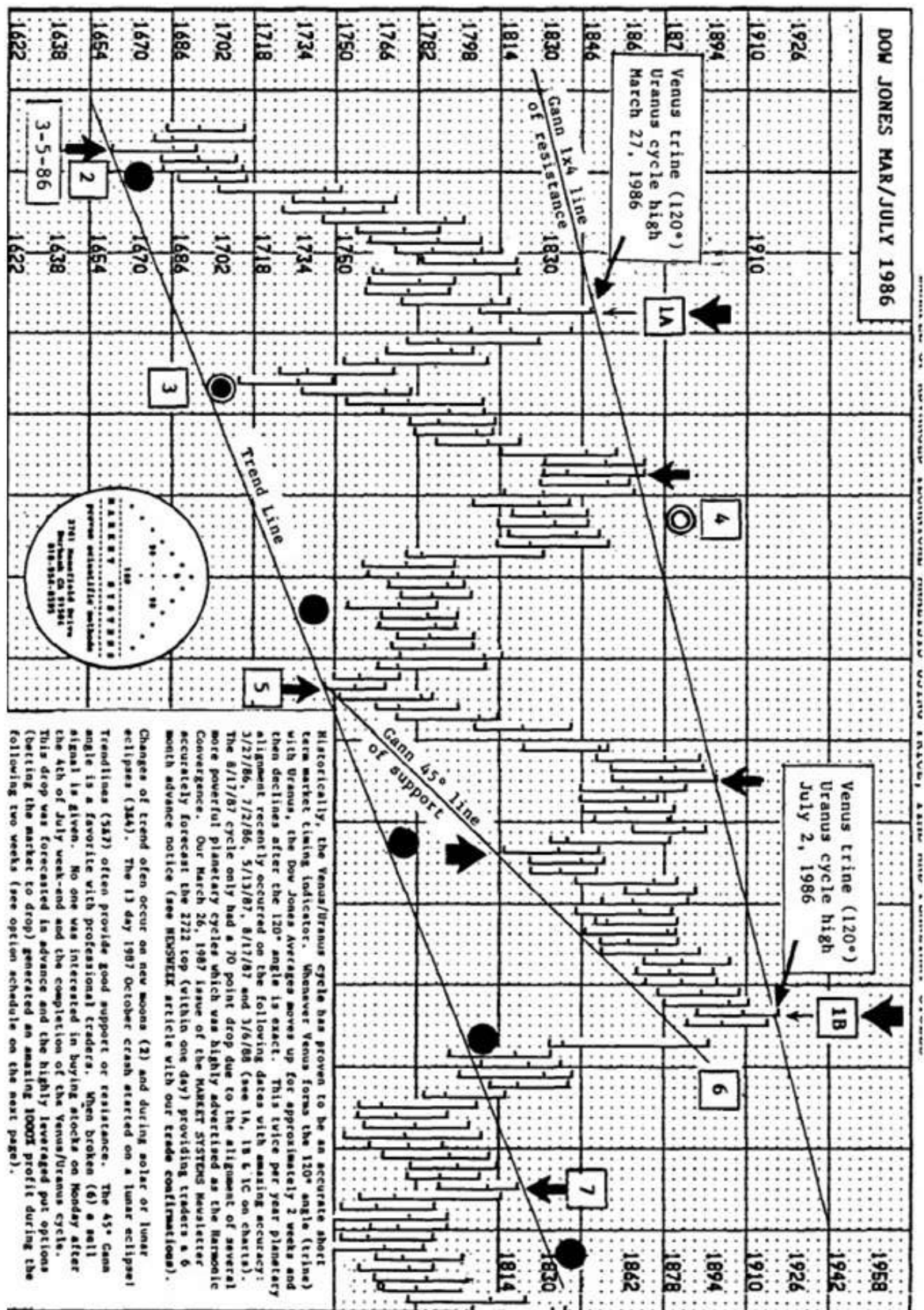
52th day, although an intermediate change – in – trend may occur between the 42th and 45th day, because 45 days is 1/8 of a year.

Other time periods that were important to Gann, at which a price reaction could be expected, are:

- Anniversary dates of major tops and bottoms
- 7 months after a major top or bottom for a minor reaction.
- 10 to 14 days is the length for a reaction in a normal market. If this period is exceeded, the next reaction should be expected after 28 to 30 days.

If you're not already confused, understand that Gann's year may not only be calendar, but “fiscal” as well; starting from major tops or bottoms. Gann's time rules consider many periods, including seasonality, Biblical references, and astronomical events.

Let's see a little example. This is an example of astronomical correlations on a Gann chart. One of Gann's beliefs, stemming from his “natural order” concept, is the influence of planetary movements on earthly events, such as the moon's perceived effect in tides. This “cosmic perspective” of Gann is unlike conventional astrology, in that planetary influences, like units of price, are unique to each market.



What is Square of Nine and how is it constructed?

We will analyze Square of Nine from William Gann's perspective. Here is what it's about:

871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901
870	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	902
869	756	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	786	903
868	755	650	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	678	787	904
867	754	649	552	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	578	679	788	905
866	753	648	551	462	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	486	579	680	789	906
865	752	647	550	461	380	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	402	487	580	681	790	907
864	751	646	549	460	379	306	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	326	403	488	581	682	791	908
863	750	645	548	459	378	305	240	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	258	327	404	489	582	683	792	909
862	749	644	547	458	377	304	239	182	133	134	135	136	137	138	139	140	141	142	143	144	145	198	259	328	405	490	583	684	793	910
861	748	643	546	457	376	303	238	181	132	91	92	93	94	95	96	97	98	99	100	101	146	199	260	329	406	491	584	685	794	911
860	747	642	545	456	375	302	237	180	131	90	57	58	59	60	61	62	63	64	65	102	147	200	261	330	407	492	585	686	795	912
859	746	641	544	455	374	301	236	179	130	89	56	31	32	33	34	35	36	37	66	103	148	201	262	331	408	493	586	687	796	913
858	745	640	543	454	373	300	235	178	129	88	55	30	13	14	15	16	17	38	67	104	149	202	263	332	409	494	587	688	797	914
857	744	639	542	453	372	299	234	177	128	87	54	29	12	3	4	5	18	39	68	105	150	203	264	333	410	495	588	689	798	915
856	743	638	541	452	371	298	233	176	127	86	53	28	11	2	1	6	19	40	69	106	151	204	265	334	411	496	589	690	799	916
855	742	637	540	451	370	297	232	175	126	85	52	27	10	9	8	7	20	41	70	107	152	205	266	335	412	497	590	691	800	917
854	741	636	539	450	369	296	231	174	125	84	51	26	25	24	23	22	21	42	71	108	153	206	267	336	413	498	591	692	801	918
853	740	635	538	449	368	295	230	173	124	83	50	49	48	47	46	45	44	43	72	109	154	207	268	337	414	499	592	693	802	919
852	739	634	537	448	367	294	229	172	123	82	81	80	79	78	77	76	75	74	73	110	155	208	269	338	415	500	593	694	803	920
851	738	633	536	447	366	293	228	171	122	121	120	119	118	117	116	115	114	113	112	111	156	209	270	339	416	501	594	695	804	921
850	737	632	535	446	365	292	227	170	169	168	167	166	165	164	163	162	161	160	159	158	157	210	271	340	417	502	595	696	805	922
849	736	631	534	445	364	291	226	225	224	223	222	221	220	219	218	217	216	215	214	213	212	211	272	341	418	503	596	697	806	923
848	735	630	533	444	363	290	289	288	287	286	285	284	283	282	281	280	279	278	277	276	275	274	273	342	419	504	597	698	807	924
847	734	629	532	443	362	361	360	359	358	357	356	355	354	353	352	351	350	349	348	347	346	345	344	343	420	505	598	699	808	925
846	733	628	531	442	441	440	439	438	437	436	435	434	433	432	431	430	429	428	427	426	425	424	423	422	421	506	599	700	809	926
845	732	627	530	529	528	527	526	525	524	523	522	521	520	519	518	517	516	515	514	513	512	511	510	509	508	507	600	701	810	927
844	731	626	625	624	623	622	621	620	619	618	617	616	615	614	613	612	611	610	609	608	607	606	605	604	603	602	601	702	811	928
843	730	729	728	727	726	725	724	723	722	721	720	719	718	717	716	715	714	713	712	711	710	709	708	707	706	705	704	703	812	929
842	841	840	839	838	837	836	835	834	833	832	831	830	829	828	827	826	825	824	823	822	821	820	819	818	817	816	815	814	813	930
961	960	959	958	957	956	955	954	953	952	951	950	949	948	947	946	945	944	943	942	941	940	939	938	937	936	935	934	933	932	931

The basic form is a square. The principle of making this square is very ingenious. The numbers are arranged in increasing order, in a specific pattern, starting with number one set in the centre. We can arrange as many numbers we wish. The numbers can be arranged starting from the middle, to the right and up, in a counterclockwise manner, or to the left and up, in a clockwise manner. When setting the Square of Nine we have to consider the trend's direction. If the trend is ascending we will arrange the numbers clockwise, if it is descending we will arrange the numbers counterclockwise.

After arranging the numbers we can observe some special similarities forming. For example on one diagonal we have the numbers 1, 9, 25, 49, 81, 121, 169 and so on. These numbers are the square of odd numbers 1, 3, 5, 7,

9, 11, 13 etc. On the same diagonal with 4 we have the numbers 16, 36, 64, 100, 144, 196 and so on which are the square of even numbers 2, 4, 6, 8, 10, 12, 14 etc. Is there a coincidence or is it harmony?

The same principle of arranging numbers can be used for other values as well. With the help of the square presented above we will analyze the value for some financial indicators. We can also input instead of numbers some calendar dates to help us calculate the day for the High and the Low. This is how such a square looks like:

08/05/06	08/06/06	08/07/06	08/08/06	08/09/06	08/10/06	08/11/06	08/12/06	08/13/06	08/14/06	08/15/06	08/16/06	08/17/06	08/18/06	08/19/06
08/04/06	06/16/06	06/17/06	06/18/06	06/19/06	06/20/06	06/21/06	06/22/06	06/23/06	06/24/06	06/25/06	06/26/06	06/27/06	06/28/06	08/20/06
08/03/06	06/15/06	05/05/06	05/06/06	05/07/06	05/08/06	05/09/06	05/10/06	05/11/06	05/12/06	05/13/06	05/14/06	05/15/06	06/29/06	08/21/06
08/02/06	06/14/06	05/04/06	04/01/06	04/02/06	04/03/06	04/04/06	04/05/06	04/06/06	04/07/06	04/08/06	04/09/06	05/16/06	06/30/06	08/22/06
08/01/06	06/13/06	05/03/06	03/31/06	03/06/06	03/07/06	03/08/06	03/09/06	03/10/06	03/11/06	03/12/06	04/10/06	05/17/06	07/01/06	08/23/06
07/31/06	06/12/06	05/02/06	03/30/06	03/05/06	02/16/06	02/17/06	02/18/06	02/19/06	02/20/06	03/13/06	04/11/06	05/18/06	07/02/06	08/24/06
07/30/06	06/11/06	05/01/06	03/29/06	03/04/06	02/15/06	02/06/06	02/07/06	02/08/06	02/21/06	03/14/06	04/12/06	05/19/06	07/03/06	08/25/06
07/29/06	06/10/06	04/30/06	03/28/06	03/03/06	02/14/06	02/05/06	02/04/06	02/09/06	02/22/06	03/15/06	04/13/06	05/20/06	07/04/06	08/26/06
07/28/06	06/09/06	04/29/06	03/27/06	03/02/06	02/13/06	02/12/06	02/11/06	02/10/06	02/23/06	03/16/06	04/14/06	05/21/06	07/05/06	08/27/06
07/27/06	06/08/06	04/28/06	03/26/06	03/01/06	02/28/06	02/27/06	02/26/06	02/25/06	02/24/06	03/17/06	04/15/06	05/22/06	07/06/06	08/28/06
07/26/06	06/07/06	04/27/06	03/25/06	03/24/06	03/23/06	03/22/06	03/21/06	03/20/06	03/19/06	03/18/06	04/16/06	05/23/06	07/07/06	08/29/06
07/25/06	06/06/06	04/26/06	04/25/06	04/24/06	04/23/06	04/22/06	04/21/06	04/20/06	04/19/06	04/18/06	04/17/06	05/24/06	07/08/06	08/30/06
07/24/06	06/05/06	06/04/06	06/03/06	06/02/06	06/01/06	05/31/06	05/30/06	05/29/06	05/28/06	05/27/06	05/26/06	05/25/06	07/09/06	08/31/06
07/23/06	07/22/06	07/21/06	07/20/06	07/19/06	07/18/06	07/17/06	07/16/06	07/15/06	07/14/06	07/13/06	07/12/06	07/11/06	07/10/06	09/01/06
09/16/06	09/15/06	09/14/06	09/13/06	09/12/06	09/11/06	09/10/06	09/09/06	09/08/06	09/07/06	09/06/06	09/05/06	09/04/06	09/03/06	09/02/06

Examples for Financial indicators and explanation

We will explain first the February 2007 High for S&P 500. That month the indicator had a High of 1.460 points. Let's identify this value on Gann's Square of Nine. The next month S&P 500 had a Low of 1.360. We will look for this value in the square also. This is the index's chart:



We can see below the two values on Gann's Square of Nine. Between the centre of the square and these points there is an angle forming. This angle is about 250 degrees. This is Gann's mathematical equation:

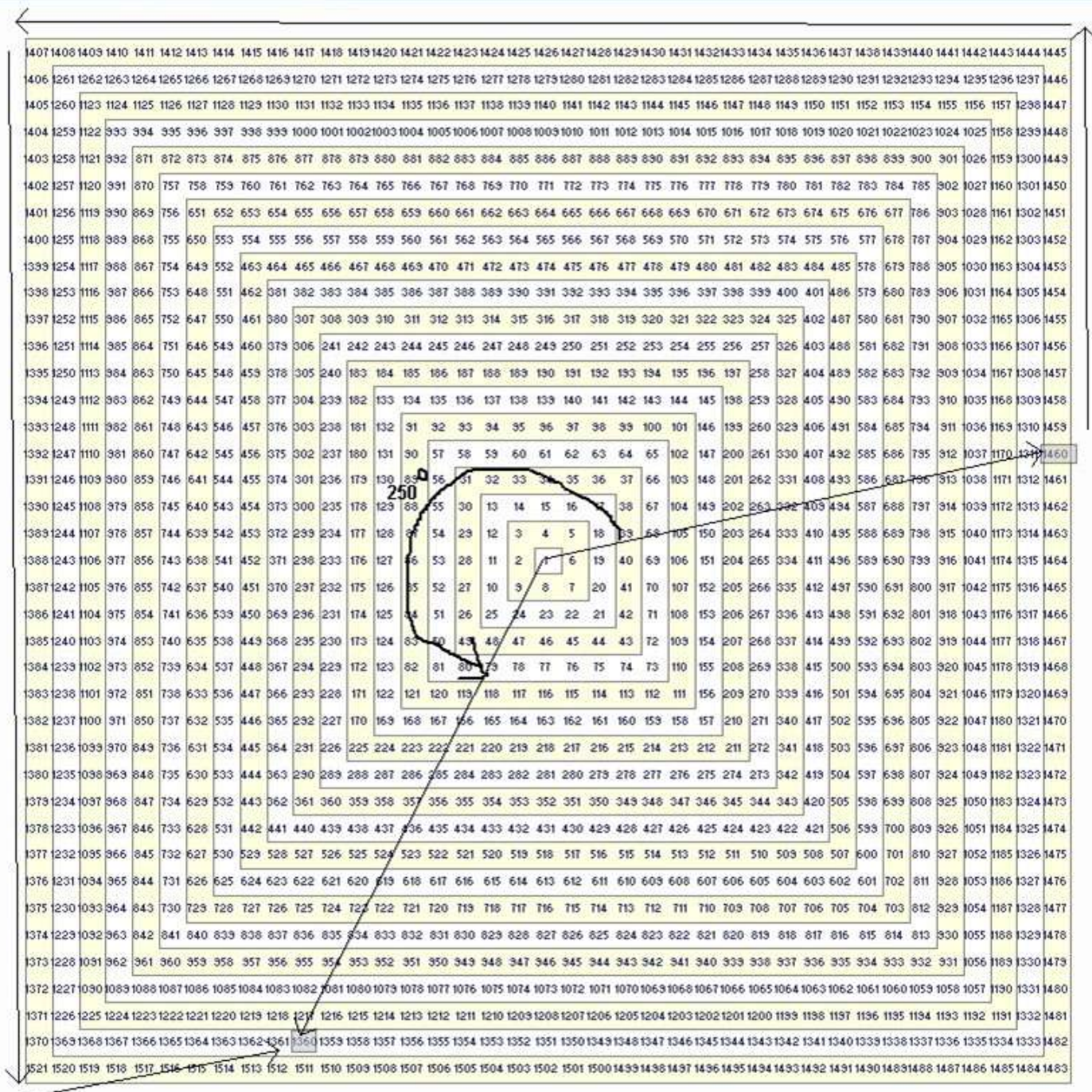
$$\text{Square root of High} - 1.4 = \text{Square root of Low}$$

Why 1.4? In trigonometry 360 degrees is defined as 2; 180 degrees as 1; 90 degrees as 0.5; and 250 degrees as 1.4.

In conclusion we have:

$$\text{Square root of } 1.460 - 1.4 = \text{Square root of } 1.360 \text{ (correct!)}$$

Let's see now why the indicator has fallen 250 degrees. During the period of time we are referring to, on the sky we had two major astrological aspects: Saturn opposition Neptune (this means 180 degrees) and Sun square Pluto (this means 90 degrees). If we add them: $180 + 90 = 270$ degrees. This value is very close to the actual fall of the index.



The forecast would have been as it follows:

When analyzing the market at the end of February, after the 1.460 High, we would have looked at the astrological aspects coming the next month. These are the opposition and square presented above. The sum of the aspects was 270 degrees. Using Gann's Square of Nine and the mathematical equation:

Square root of 1.460 – 1.5 = square root of the value of next month's Low

The result is 1.350. So the forecast would have said that the S&P 500 would have fallen to the value of 1.350 – 1.360 and than rise.

The second example is about the abrupt fall in the summer of 2007, more exactly, in August. We present the steps of the forecast:

Step 1: S&P 500 has a High of 1.550

Step 2: For the months of July and August 2007 we have the following astrological aspects: Mars square Neptune, Mars square Saturn, Saturn trine Pluto, Sun opposition Neptune. All these aspects have a negative influence. We are expecting a declining in the evolution of the index with $90 + 90 + 120 + 180 = 480$ degrees utmost.

Step 3: 480 degrees means 2.6 in trigonometry

Step 4: we apply the equation:

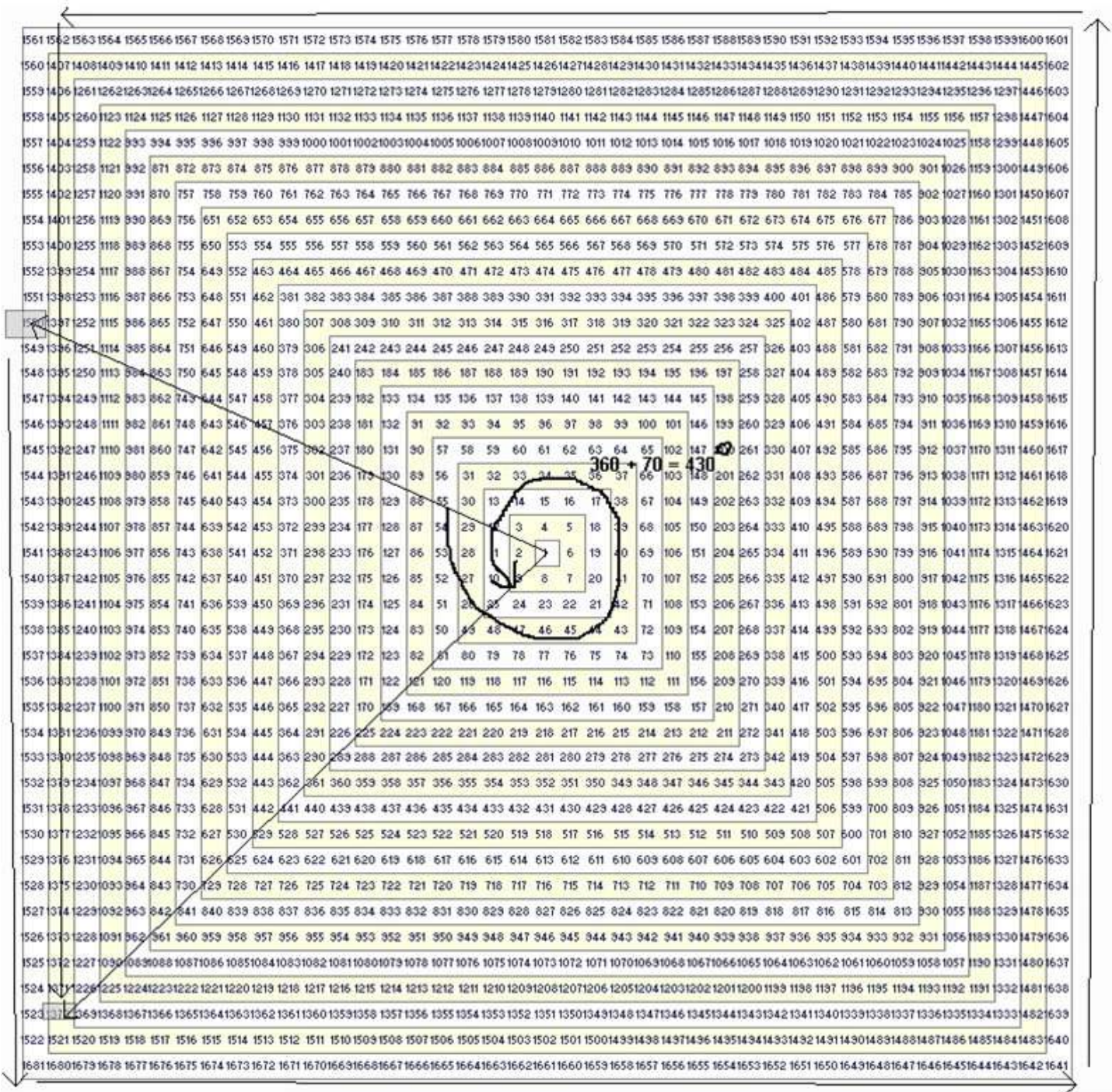
Square root of $1.550 - 2.6$ = square root of the value of next month's Low

Step 5: Next month's Low is 1.355

Step 6: We would predict that in august S&P 500 will fall from a High of 1.550 to a Low of 1.355 -1.365

The facts were that S&P 500 had a Low of 1.370 and then started rising. Nice, isn't it?





This is the last conclusive example:

This example present the forecast for S&P 500 which had a historic High in October 2007 and a decline in January 2008.

Step 1: The historic high is 1.576

Step 2: in the period October 2007 – January 2008 we have the following astrological aspects: Saturn opposition North Pole, Sun square Uranus, Sun square North Pole, Sun square Saturn, Sun square Uranus, Sun opposition Mars, Saturn trine Mercury. All these aspects are negative. We will expect a fall with $180 + 90 + 90 + 90 + 180 + 120 = 840$ degrees.

Step 3: 780 degrees is 4.6

Step 4: We apply the equation:

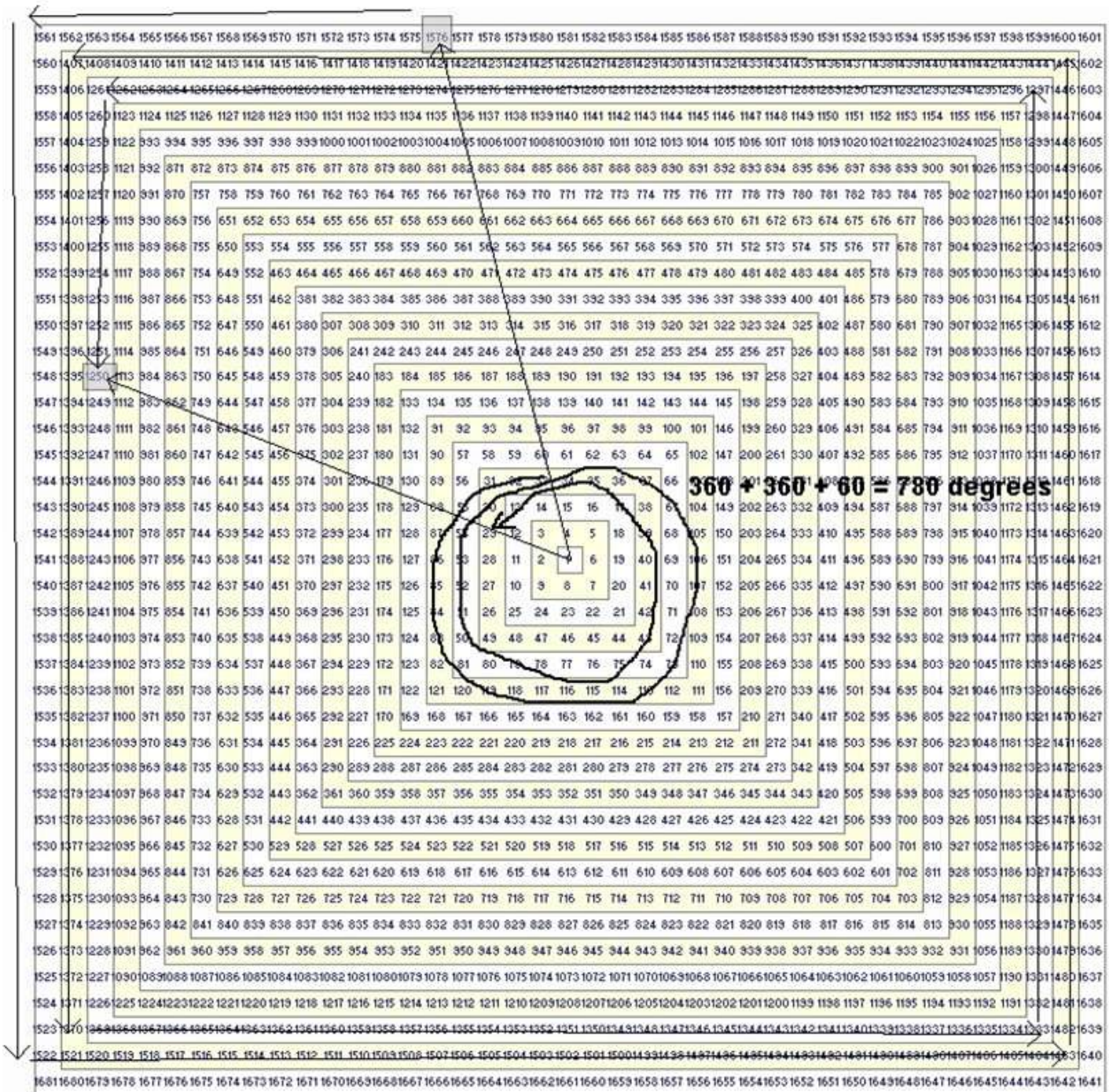
Square root of $1.576 - 4.6$ = Square root of the Low's value

Step 5: The Low equals 1.260

Step 6: the conclusion is: S&P 500 will fall after the historic High to a 1.260 Low in January 2008

The facts were that S&P 500 had a Low of 1.250 and then started rising. Is there a coincidence or is it harmony?





Conclusions:

This method of prediction is incredible exact and has a special harmony in it. It offers us correct ways of assessing future Lows and Highs for financial market's indicators.

Although it seems a complex and hard to handle method, it is a useful tool in our system of analysis. We have come to these conclusions after long years of thorough research. There are a lot of details to consider until a full understanding of the phenomenon but it can be done. We have understood Gann's method. We give you simple and easy to apply analysis, but these analysis are the result of hard and meticulous work.

We have also analyzed many past years and the rules apply. You can verify the correlation also if you are attracted to this kind of research work

By showing you this study we are not trying to convince you that astrology is perfect. We just want to highlight the fact that there are correct ways of predicting the local High and Low and the reversal points. These kinds of studies helped us along the years build our trading system, the system we are basing our analysis and forecasts on.