

THE MATHEMATICS OF THE PRINCIPAL OF SQUARES

(The Gann Square of Nine)

If you look at the square of nine, you will note that the numbers going down at a 45° angle from the center are, 9, 25, 49, 81 etc. Hence each revolution of 360° starting at 1 in the center comes up to one of the above numbers. If you take the square root of each of the numbers above, you will see that the square roots are separated by 2. The square roots are 3, 5, 7, 9 etc. As a result, we now know how to convert price movements into degrees of a circle. Each revolution of 360 degrees is represented by 2, so 1 degree is equal to 2/360 or 0.0056 added to or subtracted from the square root of the number we are converting.

Let us assume that a stock has a monthly swing chart low of 25 and we want to see where the important squares going up or down are located. Let us also assume we want to know the price increments every 45 degrees up and down up to 360 degrees. To start, take the square root of 25 which equals 5. We know that 360° equals 2 added or subtracted from 5, so 360 degrees down will be 5 - 2 = 3. 3 squared is equal to 9. 360 degrees up would be 5 + 2 = 7. 7 squared is 49. You can easily see these relationships on the *Gann Square of Nine Wheel*.

To get 45 degree increments, we divide 360 / 45 to get 8 increments. 2 / 8 = 0.25 which is the increment for each 45 degrees up or down. Case A shows the squares going up 360° and Case B shows the squares going down 360°.

CASE A

$$\begin{aligned}0^\circ &= 25 \\45^\circ &= (5.25)^2 = 27.56 \\90^\circ &= (5.50)^2 = 30.25 \\135^\circ &= (5.75)^2 = 33.06 \\180^\circ &= (6.00)^2 = 36.00 \\225^\circ &= (6.25)^2 = 39.06 \\270^\circ &= (6.50)^2 = 42.25 \\315^\circ &= (6.75)^2 = 45.56 \\360^\circ &= (7.00)^2 = 49\end{aligned}$$

CASE B

$$\begin{aligned}0^\circ &= 25 \\-45^\circ &= (4.75)^2 = 22.56 \\-90^\circ &= (4.50)^2 = 20.25 \\-135^\circ &= (4.25)^2 = 18.06 \\-180^\circ &= (6.00)^2 = 16.00 \\-225^\circ &= (3.75)^2 = 14.06 \\-270^\circ &= (3.5)^2 = 12.25 \\-315^\circ &= (3.25)^2 = 10.56 \\-360^\circ &= (3.00)^2 = 9\end{aligned}$$

Hence, we can now take any swing chart high or low and determine the key principal of square relationships going up or down from that price. I normally use the last quarterly swing chart high or low to begin looking to see what worked in the past. If you get several key hits going back in time from the price low or high, you can expect it to work just as well in the future.

For low priced tradeables like the EURO, unleaded gas, and low priced stocks, I have found that multiples of 3 degrees or 10 degrees work best. For high priced items like the DJIA, I have found 360 degree or 180 degree increments work best.