



Using Pivot Points for Predictions

By Justin Kuepper

[Contact Justin](#)

April 14, 2004

We often hear market analysts or experienced traders talking about an [equity](#) price nearing a certain [support](#) or [resistance](#) level, each of which is important because it represents a point at which a major price movement is expected to occur. But how do these analysts and professional traders come up with these so-called levels? One of the most common methods is using [pivot points](#), and here we take a look at how to calculate and interpret these [technical](#) tools.

How to Calculate Pivot Points

There are several different methods for calculating pivot points, the most common of which is the five-point system. This system uses the previous day's high, low and close, along with two support levels and two resistance levels (totaling five price points) to derive a pivot point. The equations are as follows:

$$R2 = P + (H - L) = P + (R1 - S1)$$

$$R1 = (P \times 2) - L$$

$$P = (H + L + C) / 3$$

$$S1 = (P \times 2) - H$$

$$S2 = P - (H - L) = P - (R1 - S1)$$

Here, "S" represents the support levels, "R" the resistance levels and "P" the pivot point. High, low and close are represented by the "H", "L" and "C" respectively. (Note that the high, low and close in 24-hour markets [such as [forex](#)] are often calculated using New York closing time [4:00 p.m. EST] on a 24-hour cycle. Limited markets [such as the [NYSE](#)] simply use the high, low and close from the day's standard trading hours.)

Take a look at the following example of the five-point system, which illustrates a projection of Microsoft's stock movement. Note the pivot point and the support and resistance levels.



Chart provided by Yahoo! Finance

Another common variation of the five-point system is the inclusion of the opening price in the formula:

$$P = ((\text{Today's O}) + \text{Yesterday's (H + L + C)}) / 4$$

Here, the opening price, "O", is added to the equation. Note that the opening price for foreign exchange markets is simply the last period's closing price. The supports and resistances can then be calculated in the same manner as the five-point system, except with the use of the modified pivot point.

Yet another pivot point system was developed by Tom DeMark, a famous technical analyst and president of Market Studies, Inc. This system uses the following rules:

Condition	Calculation	Tomorrow's Projections
Today's Close < Today's Open	Today's high + today's low + today's close + today's low = X	High = X/2 - today's low Low = X/2 - today's high
Today's Close > Today's Open	Today's high + today's low + today's close + today's high = X	High = X/2 - today's low Low = X/2 - today's high
Today's Close = Today's Open	Today's high + today's low + today's close + today's close = X	High = X/2 - today's low Low = X/2 - today's high

**** This article and more are available at Investopedia.com - Your Source for Investing Education ****