### How To Determinate Main Direction

Eureka System Design V2

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### **Special Terms**

**direction** The direction of price of instrument, noted by  $D_n$ .. 3

**p-shape**  $PShape_n$  is the shape of predict line of Level n, might are convex, concave, up, down and flat. usually, it means shape of best predict line. n is the sampler level from 0 to 11.. 3

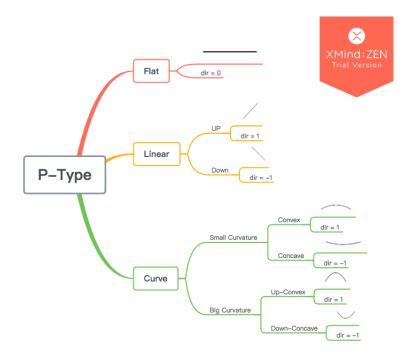
### Chapter 1

# The Signification of P-Shape

### 1.1 Type of Prediction

Table 1.1: The Types

Name	Meaning	Common Direction
Unknown		-
Flat		0
Up		1
Down		-1
Convex		1
Up-Convex		1
Concave		-1
Down-Concave		-1

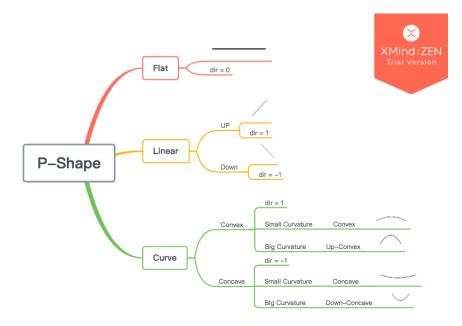


#### 1.2 Shape of Prediction

The PShape correspoding to type are:

Table 1.2: The Shapes

Shape	Type	Common Direction
Unknown	Unknown	-
Flat	Flat	0
Up	UP	1
Down	Down	-1
Convex	Convex, Up-Convex	1
Concave	Concave, Down-Concave	-1
Convex	Convex, Up-Convex	1
Concave	Concav, Down-Concave	-1



#### 1.3 The Real Direction of Shape

The Shape of Predict Line, p-shape, indicates the direction of price but behind the time, so we must check the neighborhood of a p-shape, formally, we can write to

$$PShape_{i-1} \bigoplus PShape_i \bigoplus PShape_{i+1} \Rightarrow D_n$$
 (1.1)

The  $\bigoplus$  means something on left would considerate with something on right. The Relationship of Neighbourhood are showed in this diagram:



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