Lecture 5 Pattern Recognition

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PhD & FRM

Types of CTA Strategies

Trend Following

 - Focus on current price relative to some specified measure of historical price: Moving Averages.

 - No efforts made to forecast futures prices or trends.

Pattern-Based Trading

 - analyze variables and attributes in addition to prices to identify the established trends.

 - incorporate prediction to identify the start of a new trend or the end of an existing trend.

Contrarian Trading

 - counter-trend trading, identify when a current trading trend will reverse.

Spread Trading

 - Combine Long/Short positions.

 - Calendar spreads: long March soybeans + short June soybeans.

 - Crush spread: long soybeans and short soybean oil or soybean meal.

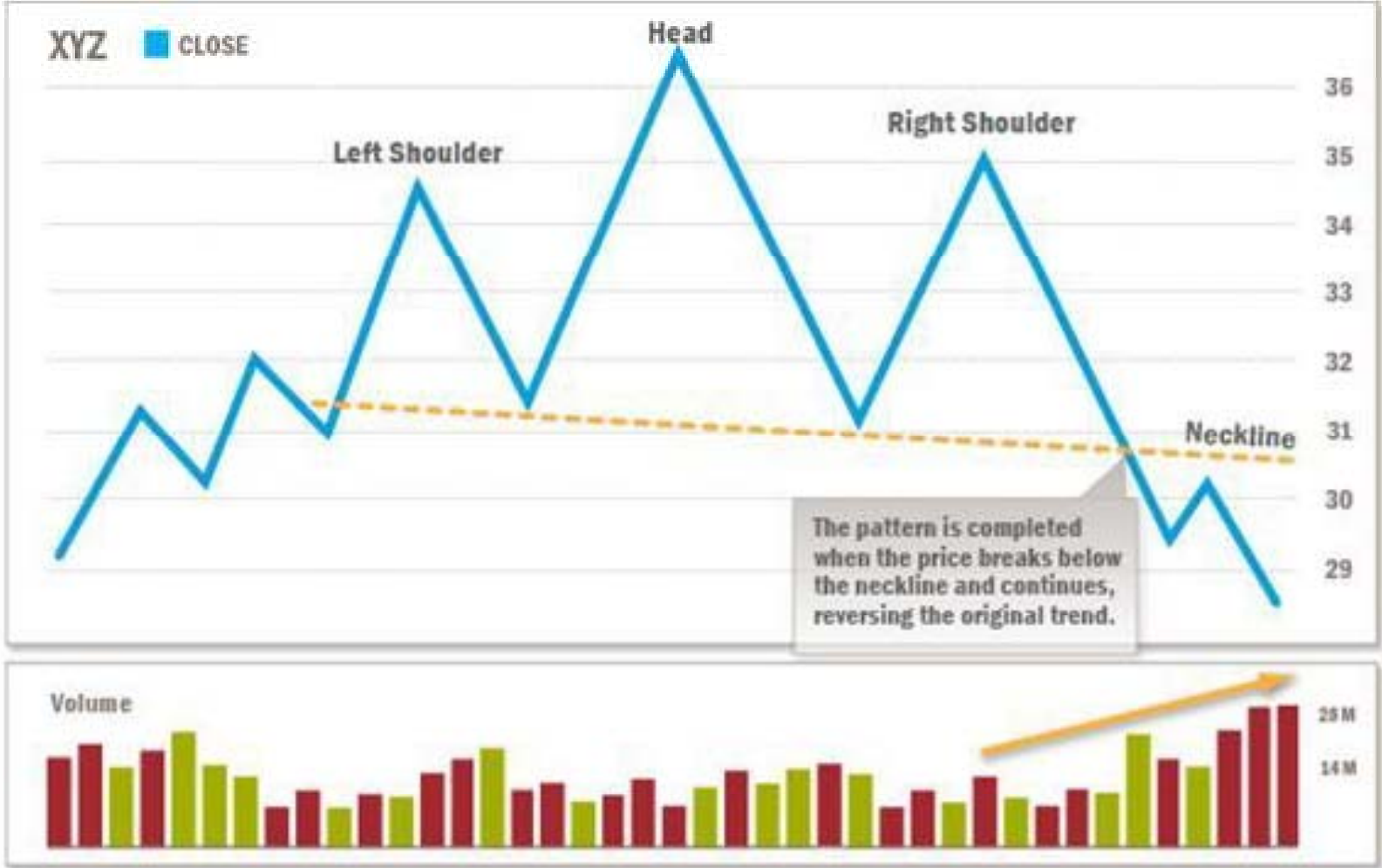**Option Trading:** seek to exploit volatility in underlying

Trend Following: An Example
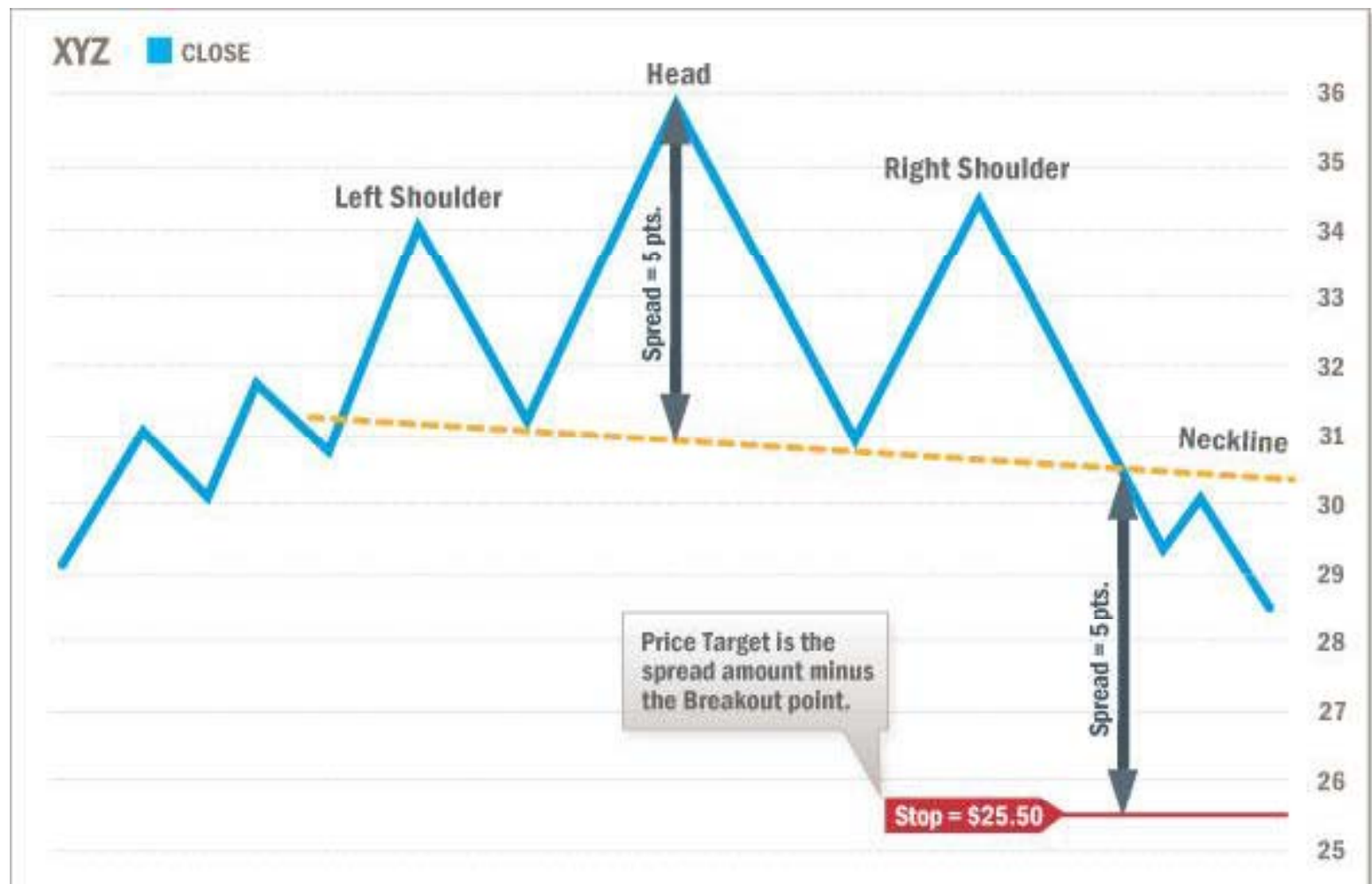## Figure 14.3 Dow Jones Industrial Average and a Six-Month Moving Average
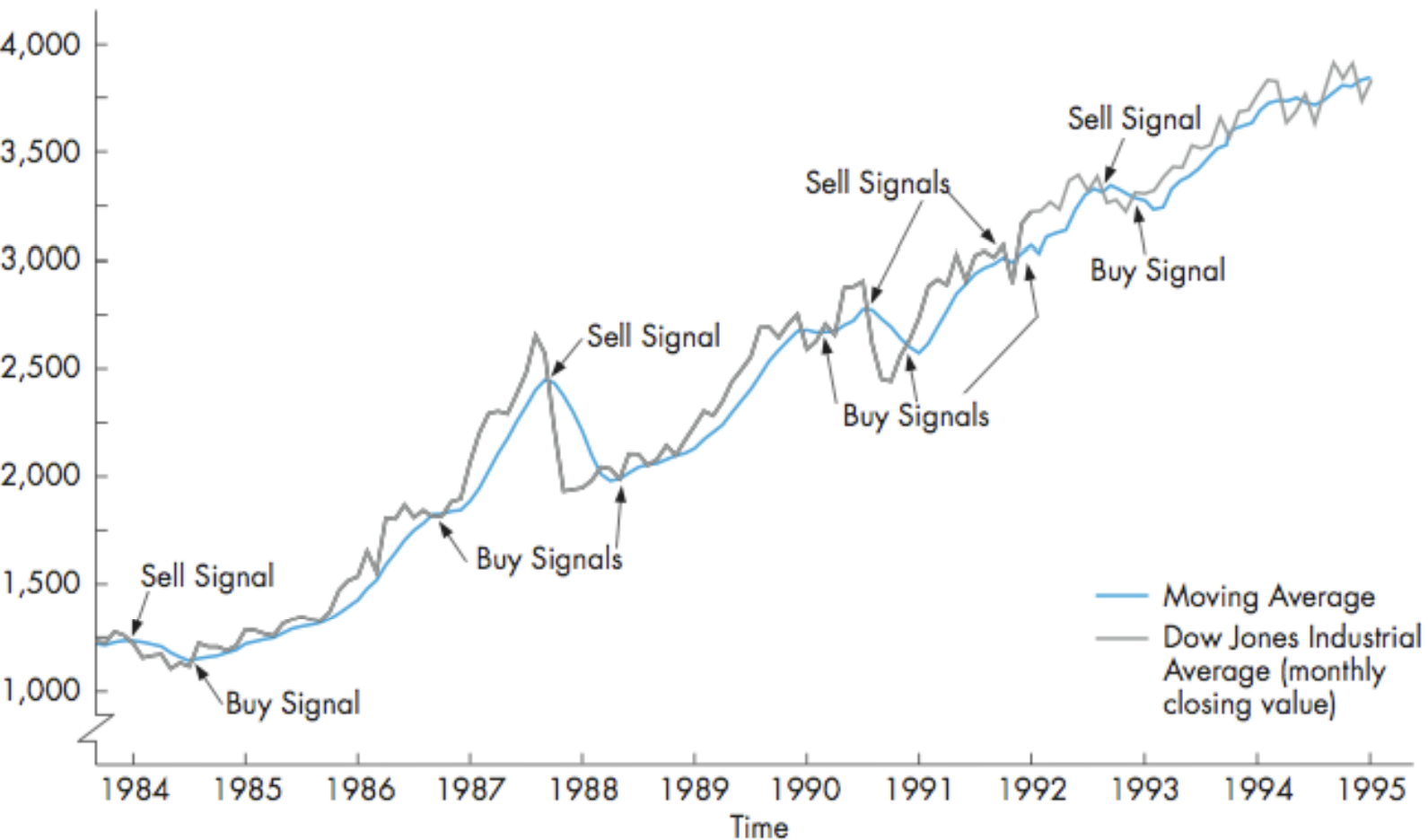
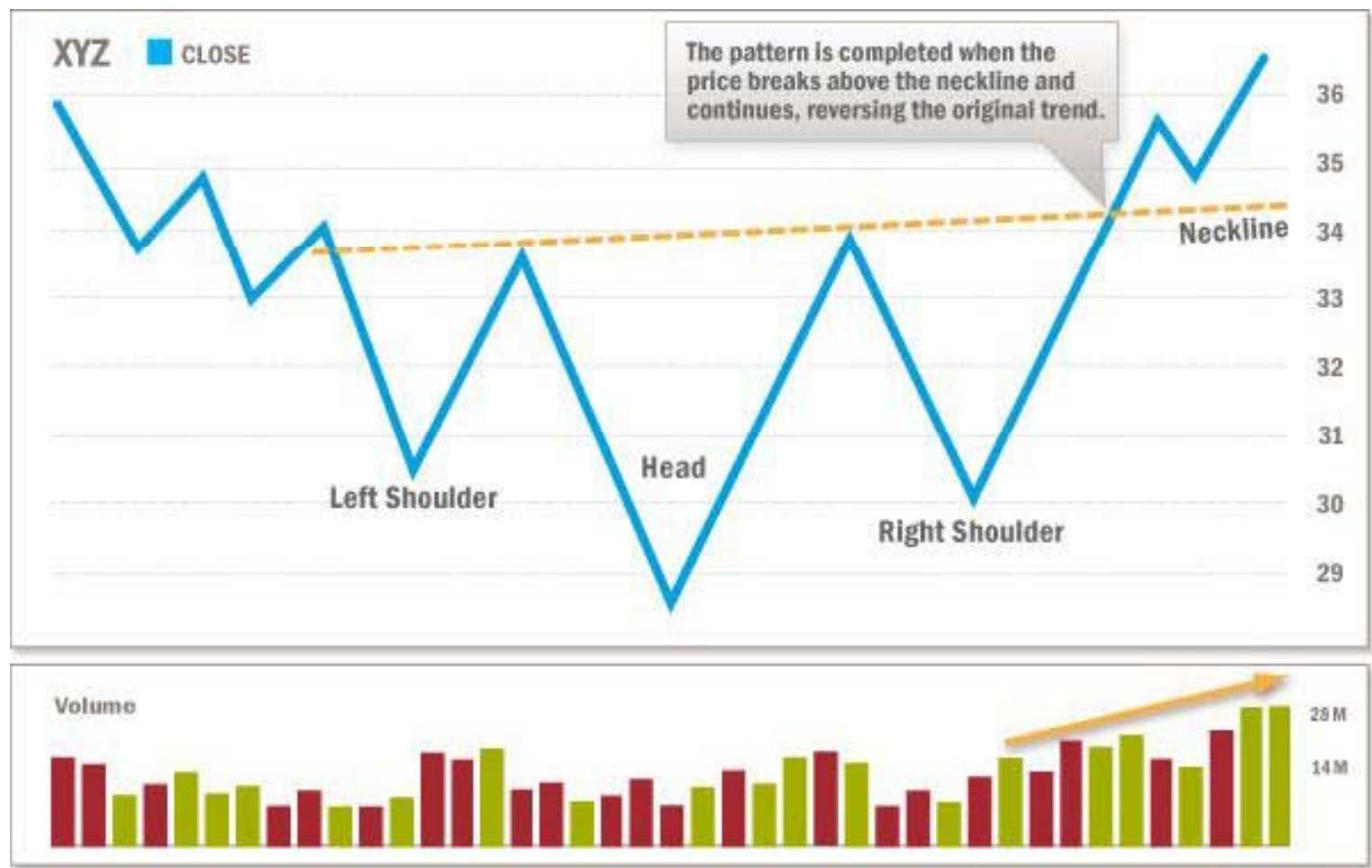# The Head and Shoulders Reversal Pattern

The Head and Shoulders

The Head and Shoulders Reversal Pattern
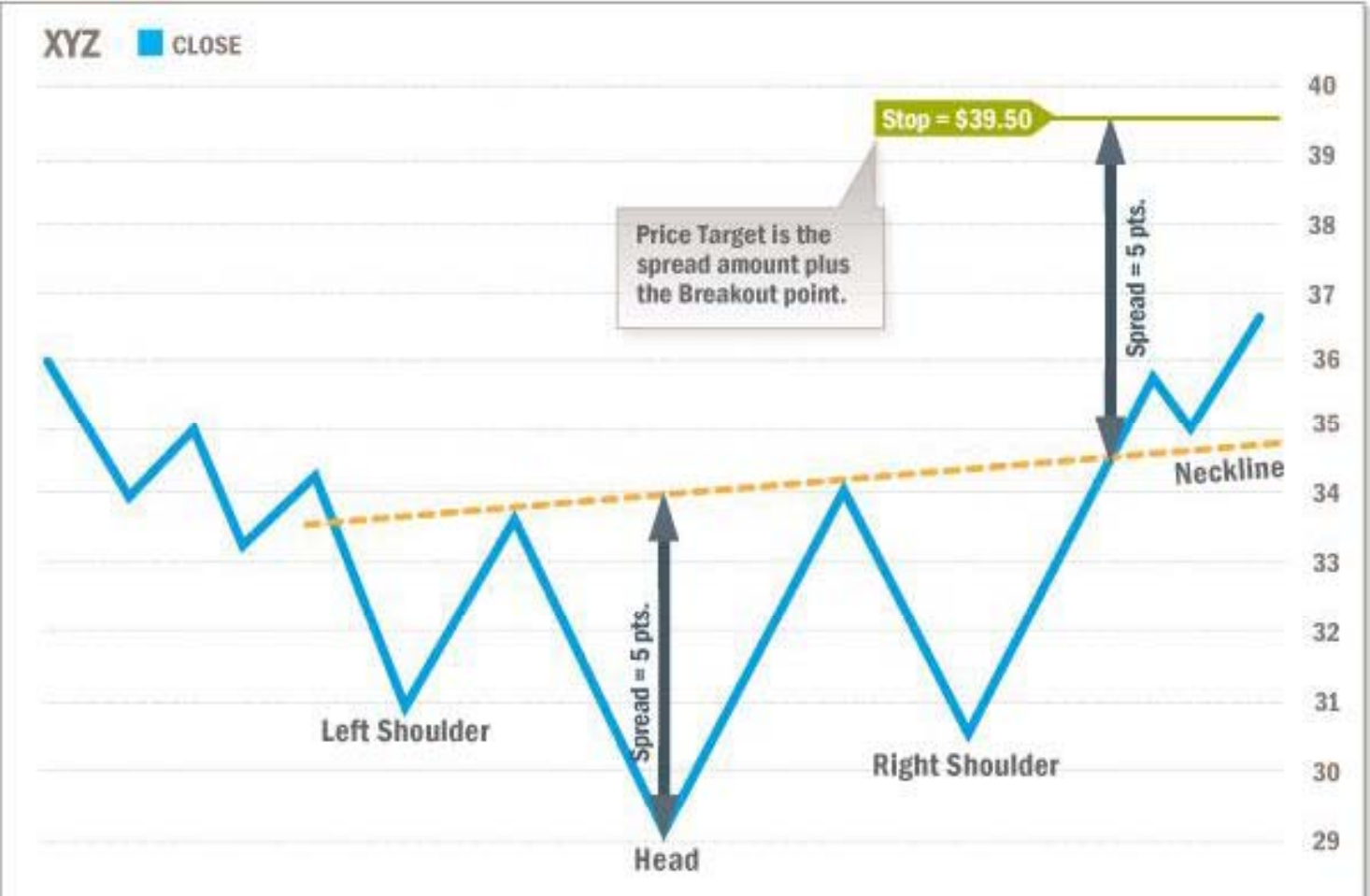
The Head and Shoulders

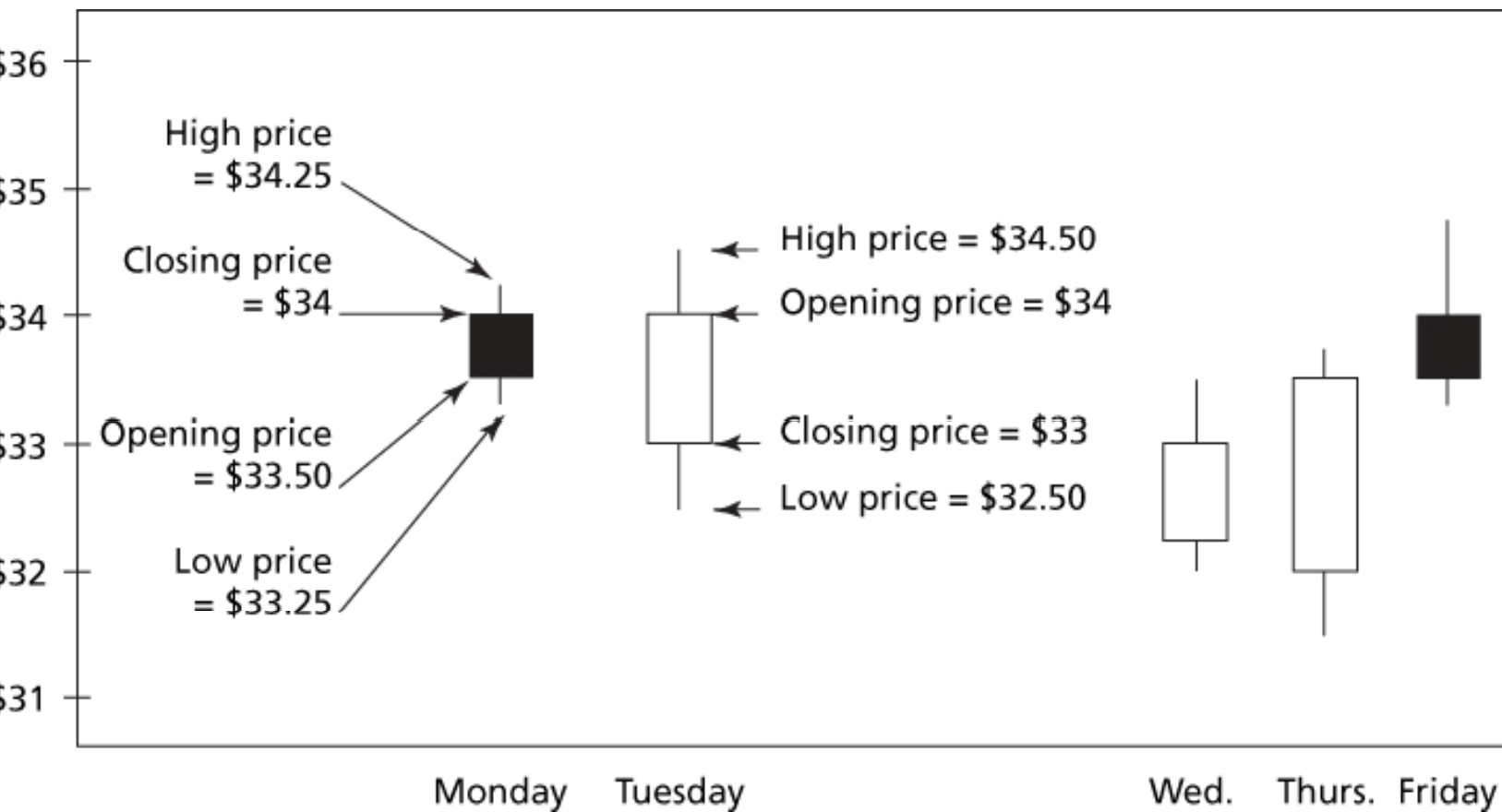# The Head and Shoulders Reversal Pattern

The Inverse Head and Shoulders

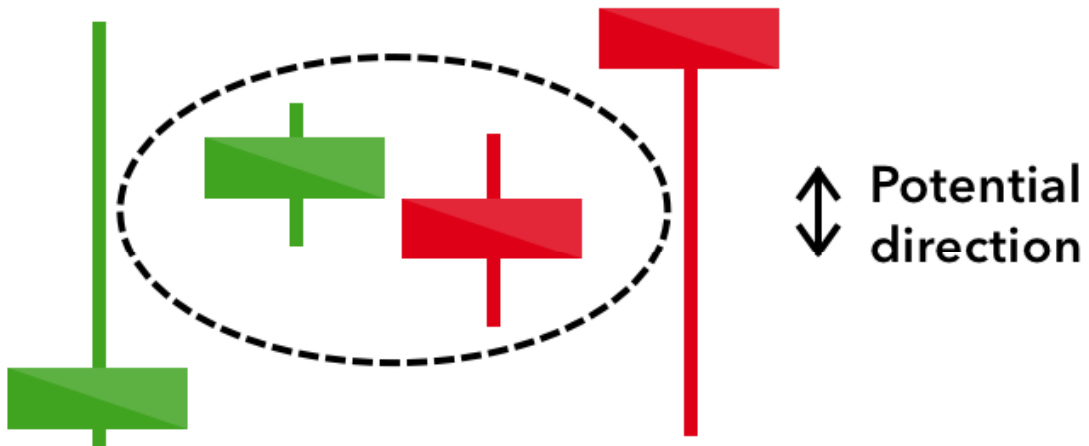# The Head and Shoulders Reversal Pattern
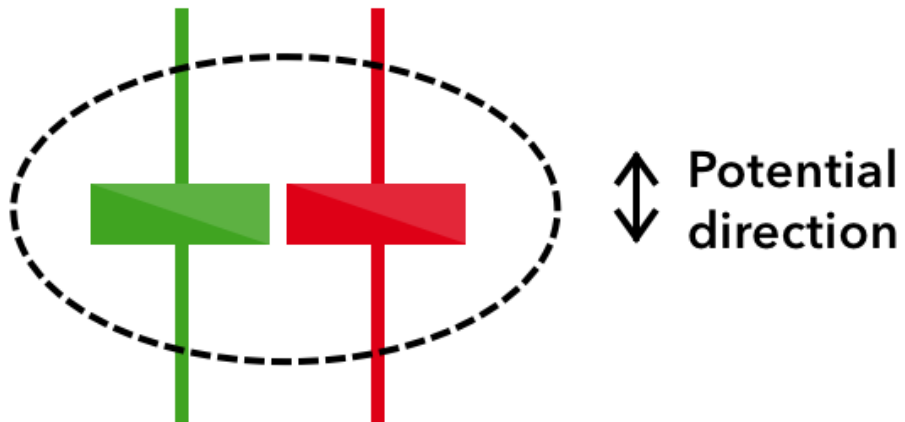
The Inverse Head and Shoulders

Candlestick Charts

- High price = $34.25
- Closing price = $34
- Opening price = $33.50
- Low price = $33.25

- High price = $34.50
- Opening price = $34
- Closing price = $33
- Low price = $32.50

$36

$35

$34

$33

$32

$31

Monday   Tuesday   Wed.   Thurs. Friday

Trend Reversal Patterns

Doji

Trend Reversal Patterns

Spinning Top

Bullish Patterns

Hammer

Potential direction
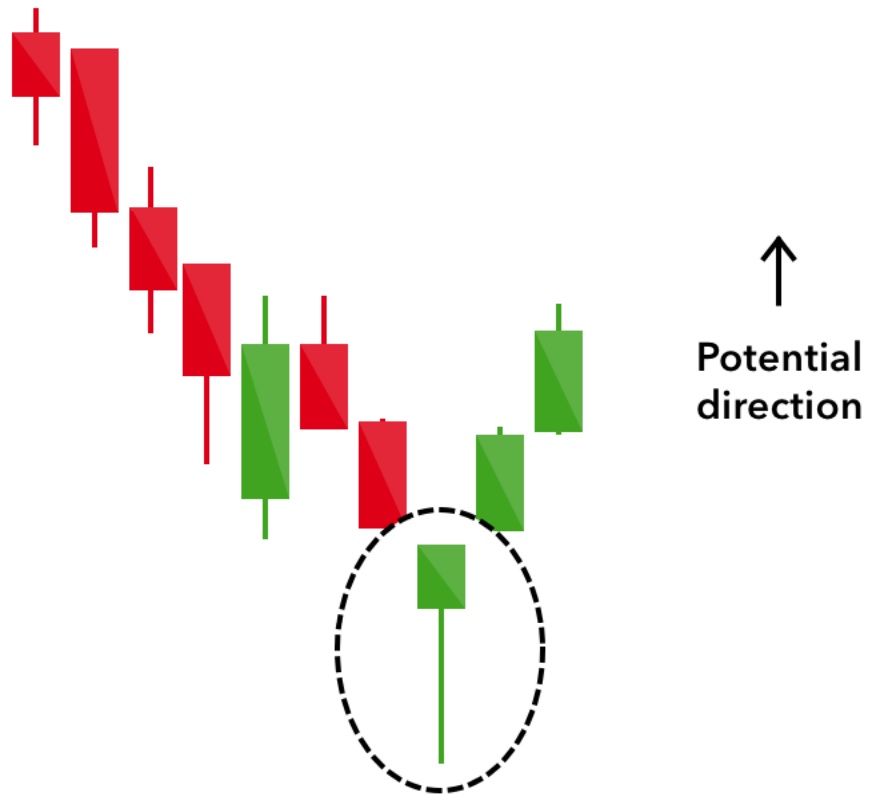
Bullish Patterns
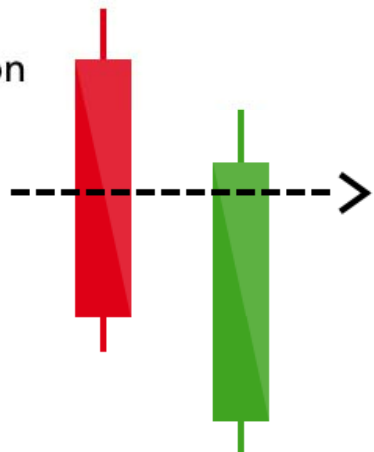
Inverse Hammer

Potential direction

Bullish Patterns

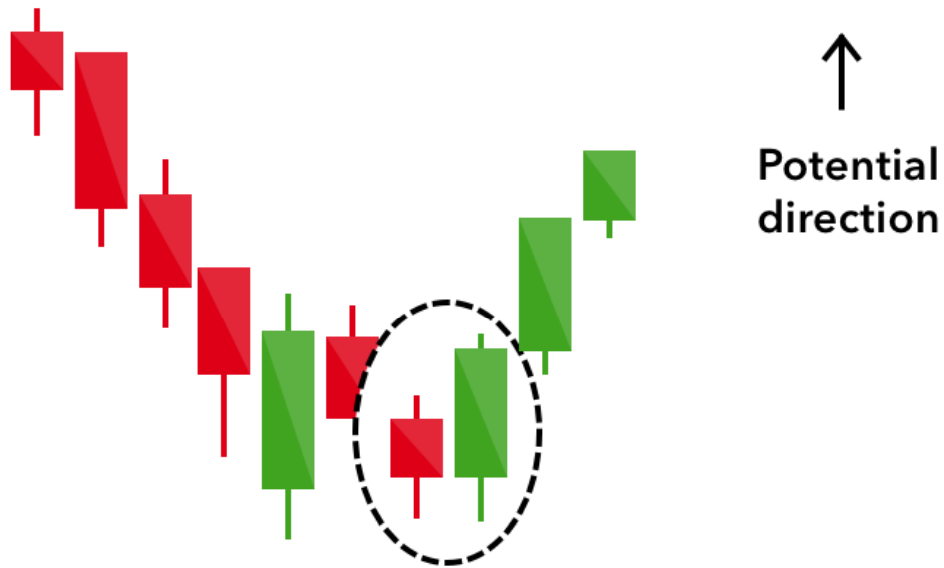## Piercing

Strong red body on
1st bar

The close on the 2nd
bar must be more than
half-way up the body of
the 1st bar

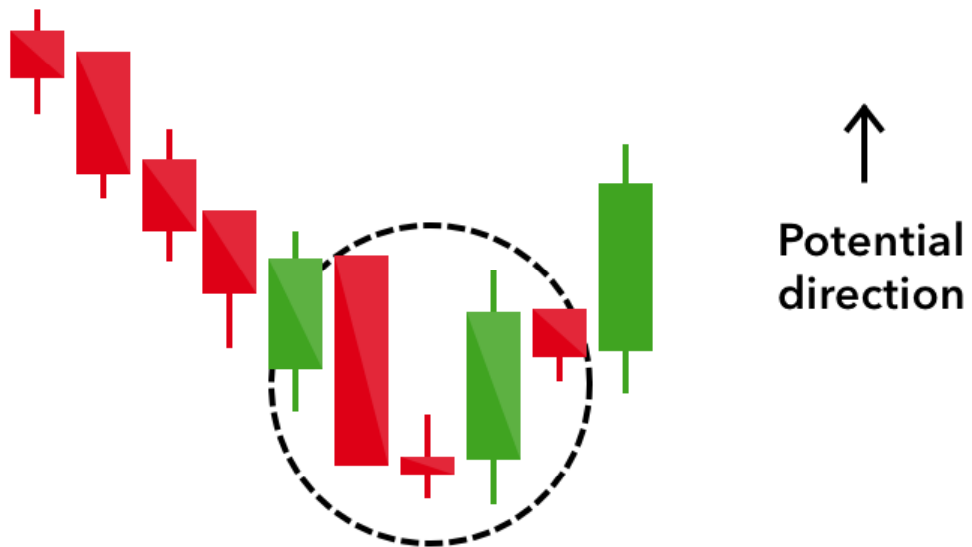Reversal signal after a down-trend
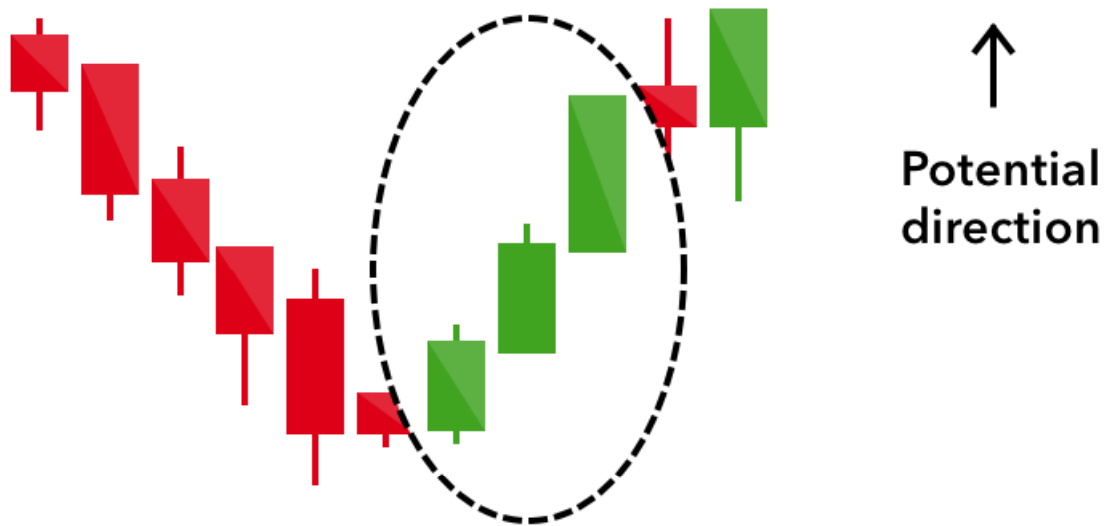
Bullish Patterns

Bullish Engulfing

Potential direction

Bullish Patterns

Morning Star

Potential direction

Bullish Patterns

Three White Soldiers

Potential direction

Bearish Patterns

Hanging Man

Potential direction

Bearish Patterns

Shooting Star

Potential direction
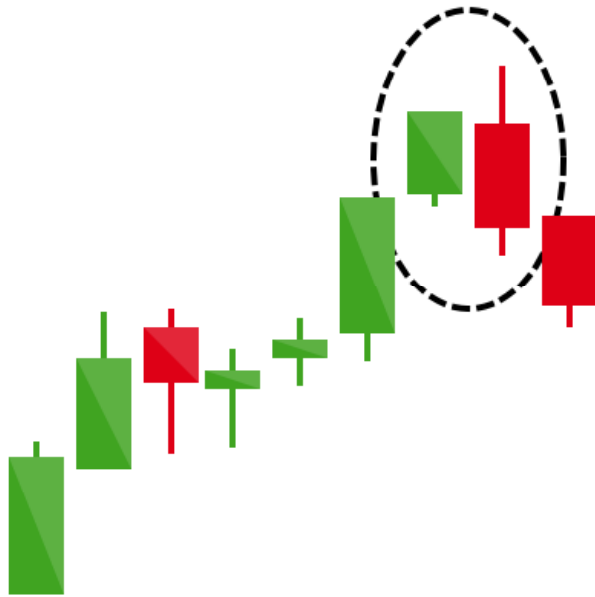
Bearish Patterns

Bearish Engulfing

Potential direction

Bearish Patterns
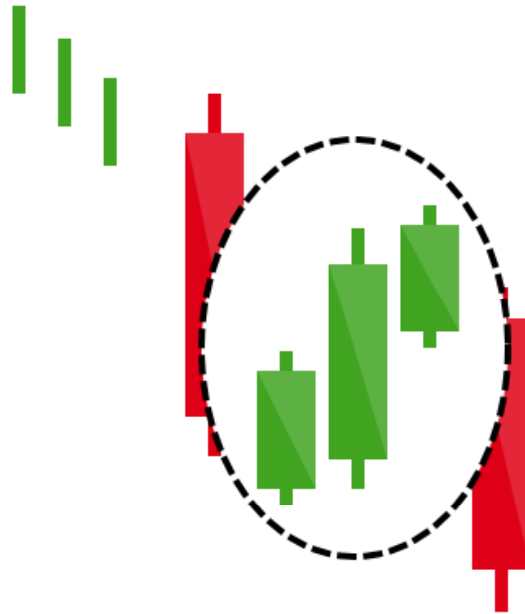
Evening Star

Bearish Patterns

Three Black Crows

Potential direction
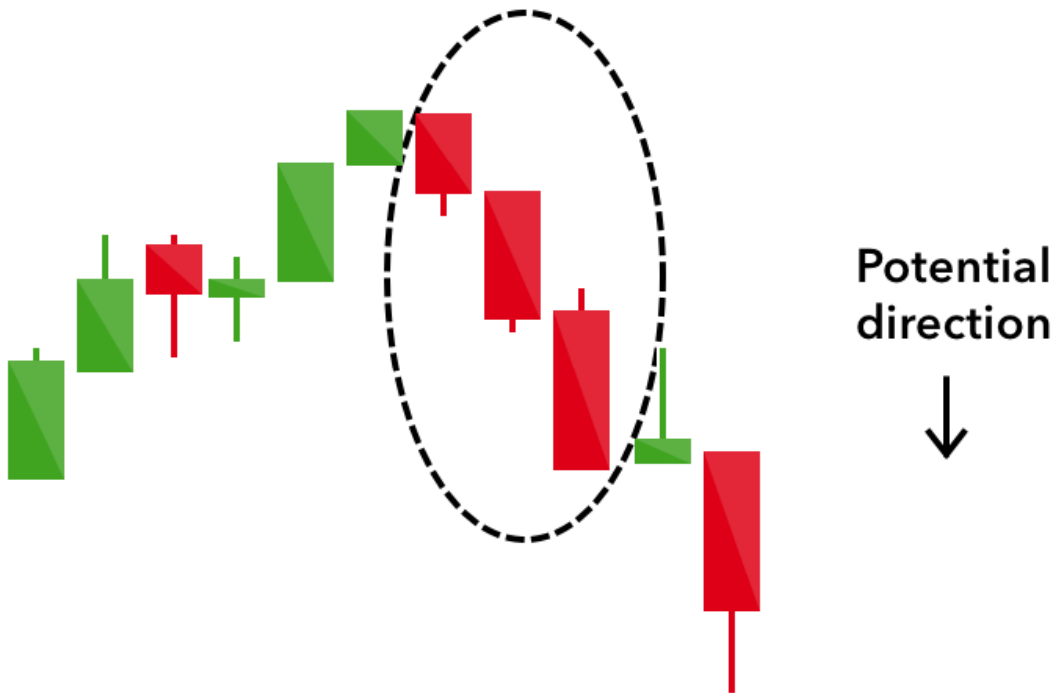
Bearish Patterns

Dark Cloud Cover

The highest price of the day -------

Closing price -------

Opening price -------

The lowest price for the day -------

Opening price -------

Confirmation -------
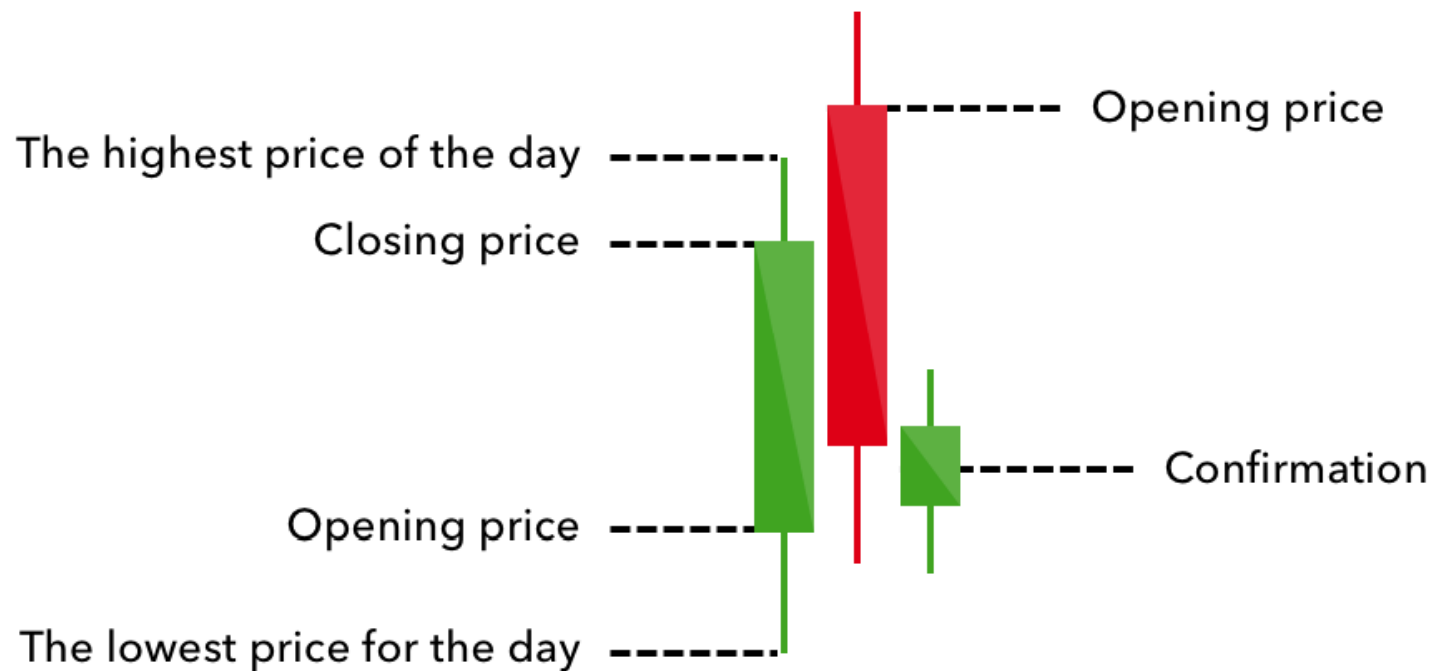
Continuation Patterns

Falling Three Methods

Continuation Patterns

Rising Three Methods