

# Reading 13: Technical Analysis

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## Question #1 of 33

Question ID: 413410

The advantages of using technical analysis include:

- ☐ A) ease in interpreting reasons behind stock price trends.
- ☒ B) the incorporation of psychological reasons behind price changes.
- ☐ C) complete objectivity.

### Explanation

Technical analysis avoids having to use fundamental data and adjusting for accounting problems, incorporates psychological as well as economic reasons behind price changes, and tells WHEN to buy; not WHY investors are buying. Drawbacks include subjective interpretation of charts and graphs.

### References

**Question From:** Session 3 > Reading 13 > LOS a

### **Related Material:**

- Key Concepts by LOS
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## Question #2 of 33

Question ID: 413433

Which of the following would a technical analyst *most likely* interpret as a "buy" signal?

- ☒ A) 10-day moving average crosses above a 60-day moving average.
- ☐ B) 30-day moving average crosses above a 5-day moving average.
- ☐ C) 20-day moving average crosses below a 100-day moving average.

### Explanation

When using moving averages to generate trading signals, a "golden cross" of a shorter-term average above a longer-term average is a buy signal, while a "dead cross" under the longer-term average is a sell signal.

### References

**Question From:** Session 3 > Reading 13 > LOS e

### **Related Material:**

- Key Concepts by LOS
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## Question #3 of 33

Question ID: 413416

Constructing a candlestick chart requires data on:

- ☐ A) high, low, and closing prices only.

- X **B)** opening, high, low, and closing prices, and trading volume.
- ✓ **C)** opening, high, low, and closing prices only.

#### Explanation

Candlestick charts require the open, high, low, and close for each trading period.

#### References

**Question From:** Session 3 > Reading 13 > LOS b

#### **Related Material:**

- Key Concepts by LOS
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### Question #4 of 33

Question ID: 710150

A technical analyst who wishes to observe the state of capital flows in the financial markets is *least likely* to examine:

- X **A)** margin debt.
- X **B)** the cash position of mutual funds.
- ✓ **C)** the short interest ratio.

#### Explanation

The short interest ratio is most commonly interpreted as an indicator of investor sentiment. Mutual fund cash positions are an indicator of the flow of funds in financial markets. The level of margin debt can be useful as an indicator of both investor sentiment and the flow of funds.

#### References

**Question From:** Session 3 > Reading 13 > LOS e

#### **Related Material:**

- Key Concepts by LOS
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### Question #5 of 33

Question ID: 498741

Asset allocation using technical analysis is *most likely* to be based on:

- ✓ **A)** intermarket analysis.
- X **B)** correlations within asset classes.
- X **C)** a stochastic oscillator.

#### Explanation

Intermarket analysis based on relative strength analysis is used to identify inflection points in the price trends of asset classes in order to adjust asset class allocations.

#### References

**Question From:** Session 3 > Reading 13 > LOS h

**Related Material:**

- Key Concepts by LOS
- 

**Question #6 of 33**

Question ID: 413423

A support level is the price range at which a technical analyst would expect the:

- ☐ A) supply of a stock to decrease substantially.
- ☐ B) demand for a stock to decrease substantially.
- ☒ C) demand for a stock to increase substantially.

Explanation

*Support and resistance levels.* Most stock prices remain relatively stable and fluctuate up and down from their true value. The lower limit to these fluctuations is called a *support level* - the price range where a stock appears cheap and attracts buyers. The upper limit is called a *resistance level* - the price range where a stock appears expensive and initiates selling.

Generally, a support level will develop after a stock has experienced a steady decline from a higher price level. Technicians believe that, at some price below the recent peak, other investors will buy who did not buy prior to the first price increase and have been waiting for a small reversal to get into the stock. When the price reaches this support price, demand surges and price and volume begin to increase again.

References

**Question From:** Session 3 > Reading 13 > LOS c

**Related Material:**

- Key Concepts by LOS
- 

**Question #7 of 33**

Question ID: 413425

A head and shoulders pattern is *most likely* to precede a reversal in trend if:

- ☐ A) volume decreases between the left shoulder and the head, then increases between the head and the right shoulder.
- ☒ B) the left shoulder, the head, and the right shoulder occur on decreasing volume.
- ☐ C) the left shoulder, the head, and the right shoulder occur on increasing volume.

Explanation

Decreasing volume on each of the high prices in a head and shoulders pattern (or each of the low prices in an inverse head and shoulders) suggests weakening in the supply and demand forces that were driving the price trend.

References

**Question From:** Session 3 > Reading 13 > LOS d

**Related Material:**

- Key Concepts by LOS
-

## Question #8 of 33

Question ID: 710151

Which of the following technical analysis indicators is *least accurately* described as an oscillator?

- ☐ A) Moving Average Convergence/Divergence.
- ☐ B) Relative Strength Index.
- ☒ C) Bollinger bands.

### Explanation

Bollinger bands are price-based indicators with unbounded values. Oscillators, such as the MACD and RSI, are indexed around a given value (such as zero) or within a given range (such as zero to 100).

### References

**Question From:** Session 3 > Reading 13 > LOS e

### **Related Material:**

- Key Concepts by LOS
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## Question #9 of 33

Question ID: 632561

An Elliott wave theorist who forecasts prices based on Fibonacci ratios is *most likely* to predict that a wave will be:

- ☐ A) four-ninths the size of the previous wave.
- ☒ B) five-eighths the size of the previous wave.
- ☐ C) six-elevenths the size of the previous wave.

### Explanation

The sequence of Fibonacci numbers is 0, 1, 1, 2, 3, 5, 8, 13... . Five-eighths is a Fibonacci ratio.

### References

**Question From:** Session 3 > Reading 13 > LOS g

### **Related Material:**

- Key Concepts by LOS
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## Question #10 of 33

Question ID: 413440

The *most* appropriate tool to use for intermarket analysis of two different asset classes is a:

- ☐ A) stochastic oscillator.
- ☒ B) relative strength chart.
- ☐ C) moving average convergence/divergence chart.

### Explanation

Relative strength charts are useful for intermarket analysis because they illustrate the performance of one asset, sector, or index relative to another. Momentum indicators, such as stochastic oscillators and MACD oscillators, are generally used to analyze

individual markets.

#### References

**Question From:** Session 3 > Reading 13 > LOS h

**Related Material:**

- Key Concepts by LOS
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### Question #11 of 33

Question ID: 413420

The trend line for a stock in an uptrend is constructed by drawing a straight line through the:

- ✓ **A)** lows.
- X **B)** highs.
- X **C)** periodic averages.

#### Explanation

Trendlines connect the increasing low points on a price chart in an uptrend and the decreasing high points in a downtrend.

#### References

**Question From:** Session 3 > Reading 13 > LOS c

**Related Material:**

- Key Concepts by LOS
- 

### Question #12 of 33

Question ID: 413414

One of the underlying assumptions of technical analysis is that supply and demand is driven by:

- X **A)** rational behavior during calm markets and irrational behavior during volatile markets.
- X **B)** rational behavior only.
- ✓ **C)** both rational and irrational behavior.

#### Explanation

Successful technical analysis assumes both rational and irrational behavior during all market conditions.

#### References

**Question From:** Session 3 > Reading 13 > LOS a

**Related Material:**

- Key Concepts by LOS
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### Question #13 of 33

Question ID: 413419

Which of the following technical analysis observations *most likely* represents a change in polarity?

- ✓ **A)** A resistance level on a line chart is breached and later acts as a support level.
- ✗ **B)** Following an "X" column, a point-and-figure chart begins a new "O" column.
- ✗ **C)** Bars on a candlestick chart change from empty to filled.

#### Explanation

"Change in polarity" refers to a perceived tendency for breached support levels to become resistance levels and breached resistance levels to become support levels.

#### References

**Question From:** Session 3 > Reading 13 > LOS c

#### **Related Material:**

- Key Concepts by LOS
- 

### **Question #14 of 33**

Question ID: 413441

When technical analysts say a stock has good "relative strength," they mean the:

- ✗ **A)** recent trading volume in the stock has exceeded the normal trading volume.
- ✓ **B)** ratio of the price of the stock to a market index has trended upward.
- ✗ **C)** stock has performed well compared to other stocks in the same risk category as measured by beta.

#### Explanation

This is the definition of relative strength. When the ratio of the stock price to the market price increases over time, the stock is out-performing the market.

#### References

**Question From:** Session 3 > Reading 13 > LOS h

#### **Related Material:**

- Key Concepts by LOS
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### **Question #15 of 33**

Question ID: 413417

Point and figure charts are *most likely* to illustrate:

- ✗ **A)** the length of time over which trends persist.
- ✗ **B)** significant increases or decreases in volume.
- ✓ **C)** changes of direction in price trends.

#### Explanation

A point-and-figure chart includes only significant price changes, regardless of their timing or volume. The technician determines what price interval to record as significant (the box size) and when to note changes of direction in prices (the reversal size). Point and figure charts do not show volume and are not scaled to even time periods.

## References

**Question From:** Session 3 > Reading 13 > LOS b

**Related Material:**

- Key Concepts by LOS
- 

### Question #16 of 33

Question ID: 710148

Relative strength analysis involves examining:

- X **A)** a point-and-figure chart.
- ✓ **B)** asset returns and index returns.
- X **C)** periodic price and volume data.

## Explanation

Relative strength analysis refers to comparing an asset returns to the returns on a benchmark, such as an index or a comparable asset price.

## References

**Question From:** Session 3 > Reading 13 > LOS b

**Related Material:**

- Key Concepts by LOS
- 

### Question #17 of 33

Question ID: 413431

Bollinger bands are drawn based on the:

- X **A)** high and low prices in a recent period.
- X **B)** difference between two smoothed moving averages.
- ✓ **C)** standard deviation of recent price changes.

## Explanation

To use Bollinger bands, an analyst will calculate the standard deviation of prices over some number of trading days, and typically will draw the bands two standard deviations above and below a moving average for the same number of days.

## References

**Question From:** Session 3 > Reading 13 > LOS e

**Related Material:**

- Key Concepts by LOS
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### Question #18 of 33

Question ID: 413429

Closing prices for a commodity were 21.4 on Monday, 22.2 on Tuesday, 21.8 on Wednesday, 22.4 on Thursday, and 23.2 on Friday. The five-day standard deviation is 0.7 and the 30-day standard deviation is 1.0. On Friday, five-day Bollinger bands using two standard deviations are *closest* to:

- ☐ A) 24.2 and 20.2.
- ☐ B) 24.6 and 21.8.
- ☒ C) 23.6 and 20.8.

#### Explanation

Bollinger bands are drawn a chosen number of standard deviations above and below a moving average, where the moving average and the standard deviation are calculated using the same number of periods. The 5-day moving average is  $(21.4 + 22.2 + 21.8 + 22.4 + 23.2) / 5 = 22.2$ . Using two 5-day standard deviations, the upper band on Friday is  $22.2 + 2(0.7) = 23.6$  and the lower band is  $22.2 - 2(0.7) = 20.8$ .

#### References

**Question From:** Session 3 > Reading 13 > LOS e

#### **Related Material:**

- Key Concepts by LOS
- 

## Question #19 of 33

Question ID: 710149

After trending upward for several weeks, the price of Vibex, Inc. stock reaches a high of \$54 before falling to \$48 over the following week. The stock then rallies to \$57 but then declines again to \$48. The following week, the stock increases to \$52 on light volume before ending the week at \$46. A technical analyst observing this pattern would *most likely* describe it as a:

- ☒ A) head-and-shoulders pattern.
- ☐ B) continuation pattern.
- ☐ C) triangle pattern.

#### Explanation

The pattern described here is a head and shoulders top with the head at \$57 and the neckline at \$48. A head-and-shoulders pattern is typically interpreted as indicating a reversal in trend.

#### References

**Question From:** Session 3 > Reading 13 > LOS d

#### **Related Material:**

- Key Concepts by LOS
- 

## Question #20 of 33

Question ID: 413413

One of the assumptions of technical analysis is:

- ☐ A) the market is efficient.
- ☒ B) supply and demand are driven by rational and irrational behavior.



X **C)** all analysts have all current information.

#### Explanation

The market is driven by rational and irrational behavior.

#### References

**Question From:** Session 3 > Reading 13 > LOS a

#### **Related Material:**

- Key Concepts by LOS
- 

### **Question #21 of 33**

Question ID: 413438

Elliott wave theory describes the typical pattern of price movements as:

- X **A)** five waves with the direction of the trend, followed by four waves against the direction of the trend.
- X **B)** four waves with the direction of the trend, followed by three waves against the direction of the trend.
- ✓ **C)** five waves with the direction of the trend, followed by three waves against the direction of the trend.

#### Explanation

According to Elliott wave theory, prices tend to move in five waves with the direction of the trend and three waves against the direction of the trend.

#### References

**Question From:** Session 3 > Reading 13 > LOS g

#### **Related Material:**

- Key Concepts by LOS
- 

### **Question #22 of 33**

Question ID: 413436

A technical analyst who identifies a decennial pattern and a Kondratieff wave *most likely*:

- ✓ **A)** believes market prices move in cycles.
- X **B)** is analyzing a daily or intraday price chart.
- X **C)** associates these phenomena with U.S. presidential elections.

#### Explanation

The decennial pattern and the Kondratieff wave are cycles of ten and 54 years, respectively. A technical analyst would be most likely to use these cycles to interpret long-term charts of monthly or annual data. Presidential elections in the United States are a possible explanation for a four-year cycle.

#### References

**Question From:** Session 3 > Reading 13 > LOS f

**Related Material:**

- Key Concepts by LOS
- 

### Question #23 of 33

Question ID: 413435

Technical analysts who use cycles define a Kondratieff wave as a cycle of:

- ☐ A) 10 years.
- ☐ B) 18 years.
- ☒ C) 54 years.

#### Explanation

The Kondratieff wave is a 54-year cycle that some technical analysts believe exists for equity market prices.

#### References

**Question From:** Session 3 > Reading 13 > LOS f

**Related Material:**

- Key Concepts by LOS
- 

### Question #24 of 33

Question ID: 413428

A trend is *most likely* to reverse if the price chart displays a:

- ☐ A) descending triangle pattern.
- ☐ B) rectangle pattern.
- ☒ C) head and shoulders pattern.

#### Explanation

Head and shoulders (and inverse head and shoulders) patterns typically indicate a reversal of a price trend. Triangle and rectangle patterns typically suggest the price trend will continue in the same direction.

#### References

**Question From:** Session 3 > Reading 13 > LOS d

**Related Material:**

- Key Concepts by LOS
- 

### Question #25 of 33

Question ID: 413412

A technical analyst believes stock prices are primarily driven by:

- ☐ A) the random walk hypothesis.

- ✓ **B)** market supply and demand forces.
- ✗ **C)** specialist trading.

#### Explanation

Other assumptions of technical analysis include: Supply and demand is driven by both rational and *irrational* behavior, security prices move in trends that persist for long periods of time, and while the cause for changes in supply and demand are difficult to determine, the actual shifts in supply and demand can be observed in market price behavior.

#### References

**Question From:** Session 3 > Reading 13 > LOS a

#### **Related Material:**

- Key Concepts by LOS
- 

### **Question #26 of 33**

Question ID: 413421

The resistance level signifies the price at which a stock's supply would be expected to:

- ✗ **A)** decrease substantially.
- ✗ **B)** cause the stock price to "break out".
- ✓ **C)** increase substantially.

#### Explanation

*Support and resistance levels.* Most stock prices remain relatively stable and fluctuate up and down from their true value. The lower limit to these fluctuations is called a *support level* - the price range where a stock appears cheap and attracts buyers. The upper limit is called a *resistance level* - the price range where a stock appears expensive and initiates selling.

Generally, a resistance level tends to develop after a stock has experienced a steady decline from a higher price level. Technicians believe that the decline in price will cause some investors who acquired the stock at a higher price to look for an opportunity to sell it near their break-even points. Therefore, the supply of stock owned by investors is overhanging the market. When the price rebounds to the target price set by these investors, this overhanging supply of stock comes to the market and dramatically reverses the price increase on heavy volume.

#### References

**Question From:** Session 3 > Reading 13 > LOS c

#### **Related Material:**

- Key Concepts by LOS
- 

### **Question #27 of 33**

Question ID: 413426

An inverse head and shoulders pattern *most likely* indicates:

- ✗ **A)** the continuation of a downtrend.
- ✓ **B)** the reversal of a downtrend.
- ✗ **C)** the reversal of an uptrend.

### Explanation

Inverse head and shoulders patterns typically occur after downtrends and indicate that the trend is going to reverse.

### References

**Question From:** Session 3 > Reading 13 > LOS d

#### **Related Material:**

- Key Concepts by LOS
- 

## **Question #28 of 33**

Question ID: 484168

The point where technicians expect a substantial increase in the demand for a stock to occur is called a:

- ✓ **A)** support level.
- X **B)** break-out point.
- X **C)** resistance level.

### Explanation

*Support and resistance levels.* Most stock prices remain relatively stable and fluctuate up and down from their true value. The lower limit to these fluctuations is called a *support level* - the price range where a stock appears cheap and attracts buyers. The upper limit is called a *resistance level* - the price range where a stock appears expensive and initiates selling. A breakout occurs when the price breaches a support or resistance level and thus may indicate either an increase or a decrease in demand for a stock.

### References

**Question From:** Session 3 > Reading 13 > LOS c

#### **Related Material:**

- Key Concepts by LOS
- 

## **Question #29 of 33**

Question ID: 413427

A trend is *most likely* to continue if the price chart displays a(n):

- X **A)** inverse head and shoulders pattern.
- ✓ **B)** ascending triangle pattern.
- X **C)** double top.

### Explanation

Triangles are considered to be continuation patterns. An inverse head and shoulders pattern would most likely indicate the reversal of a downtrend, while a double top would most likely indicate the reversal of an uptrend.

### References

**Question From:** Session 3 > Reading 13 > LOS d

#### **Related Material:**

- Key Concepts by LOS
- 

### Question #30 of 33

Question ID: 413411

Which of the following is *least likely* an underlying assumption of technical analysis?

- ☐ A) Prices are determined by supply and demand.
- ☐ B) Supply and demand for a stock is driven by rational and irrational behavior.
- ☒ C) Markets are efficient and all known information is reflected in prices.

#### Explanation

For technical analysis to succeed, markets must have some inefficiency in order for trends to develop.

#### References

**Question From:** Session 3 > Reading 13 > LOS a

#### **Related Material:**

- Key Concepts by LOS
- 

### Question #31 of 33

Question ID: 413437

Technical analysts who employ Elliott Wave Theory are *most likely* to use Fibonacci numbers to forecast the:

- ☒ A) sizes of waves.
- ☐ B) number of subwaves within a larger wave.
- ☐ C) timing of wave direction changes.

#### Explanation

In Elliott Wave Theory, the sizes of waves are believed to correspond to ratios of Fibonacci numbers. Technical analysts who employ this theory may use Fibonacci ratios to estimate price targets.

#### References

**Question From:** Session 3 > Reading 13 > LOS g

#### **Related Material:**

- Key Concepts by LOS
- 

### Question #32 of 33

Question ID: 632560

A technical analyst examining the past 12 months of daily price data for evidence of cycles is *most likely* to identify:

- ☐ A) Kondratieff waves.
- ☒ B) Elliott wave patterns.
- ☐ C) decennial patterns.

### Explanation

Waves in Elliott wave theory vary in length and can be as short as a few minutes. Decennial patterns refer to ten-year cycles. The Kondratieff wave refers to a 54-year cycle.

### References

**Question From:** Session 3 > Reading 13 > LOS f

**Related Material:**

- Key Concepts by LOS
- 

## Question #33 of 33

Question ID: 413415

A technical analysis chart that illustrates only the closing prices of a security on each trading day is *best* described as a:

- X **A)** point and figure chart.
- ✓ **B)** line chart.
- X **C)** bar chart.

### Explanation

Line charts are composed of closing prices for each trading day connected by lines. Bar charts require high and low prices for each trading day. Point and figure charts do not necessarily show each trading day's closing price.

### References

**Question From:** Session 3 > Reading 13 > LOS b

**Related Material:**

- Key Concepts by LOS