Security Market Indices and Market Efficiency

Test ID: 7697351

Question #1 of 80

Question ID: 415189

The table below lists information on price per share and shares outstanding for three stocks.

	As of Beginning of Year		*As of End of Year*	
Stock	*Price per Share ($)*	*# Shares Outstanding*	*Price per Share ($)*	*# shares Outstanding*
Mertz	10	10,000	15	10,000
Norton	50	5,000	50	5,000
Rubble	100	500	85	500

At the beginning of the year, the value of a market-cap weighted index of these three stocks was 100. The index value at year-end is *closest to:*

✗ **A) 44.3**

✓ **B)** 110.6

✗ **C)** 93.8

Explanation

Market-cap weighted index = (ending market capitalization / beginning market capitalization) × beginning index value.

Beginning market capitalization = (10)(10,000) + (50)(5,000) + (100)(500) = 400,000

Ending market capitalization = (15)(10,000) + (50)(5,000) + (85)(500) = 442,500

Index value = (442,500 / 400,000) × 100 = 110.625

Question #2 of 80

Question ID: 415222

A stock is said to be undervalued if its market price is:

✗ **A) less than its book value.**

✓ **B)** less than its intrinsic value.

✗ **C)** greater than its intrinsic value.

Explanation

A security with a market price less than its intrinsic value is undervalued.

Question #3 of 80

Question ID: 415239

Under the efficient market hypothesis (EMH), the major effort of the portfolio manager should be to:

✗ **A) follow a strict buy and hold strategy.**

✗ **B)** minimize systematic risk in the portfolio.

✓ **C)** achieve complete diversification of the portfolio.

Explanation

In an efficient market, portfolio managers must create and maintain the appropriate mix of assets to meet their client's needs. The portfolio should be diversified to eliminate unsystematic risk. The appropriate systematic risk will depend on the clients risk tolerance and return requirement. Over time the needs of the client and environment will justify changes to the portfolio. The manager should also try to minimize transaction costs and at least try to match the performance of a benchmark.

Question #4 of 80

Question ID: 415205

The Top Banking Index contains stocks in the finance industry that represent more than 90% of the total market capitalization for the finance industry. The index is *best* described as a:

✗ **A) style index.**

✓ **B)** sector index.

✗ **C)** broad market index.

Explanation

A sector index measures the returns for an industry sector such as financials. Style indexes measure the returns to strategies that are differentiated by market capitalization and by value or growth. A broad market index typically consists of constituent securities that represent 90% or more of the total market capitalization for a given market.

Question #5 of 80

Question ID: 415173

When using a security market index to represent a market's performance, the performance of that market over a period of time is *best* represented by:

✓ **A) the percent change in the index value.**

✗ **B)** the change in the index value.

✗ **C)** the index value.

Explanation

Percentage changes in the value of a security market index over time represent the performance of the market, segment, or asset class from which the securities are chosen.

Question #6 of 80

Question ID: 415179

The value of a security market index at the end of December is 1,200. The index returns for the next six months are:

Month	Return
January	3.89%
February	8.76%
March	−4.74%
April	6.88%

May	−5.39%
June	−8.12%

The index value at the end of June is *closest to*:

✗ **A) 1,186.**

✗ **B)** 1,214.

✓ **C)** 1,200.

Explanation

The index value at the end of June is
1,200(1.0389)(1.0876)(0.9526)(1.0688)(0.9461)(0.9188) = 1,200.

Note that the compound rate of return is
(1.0389)(1.0876)(0.9526)(1.0688)(0.9461)(0.9188)−1 = 0.

Question #7 of 80

Question ID: 415211

Which of the following statements is *most accurate* regarding commodity indexes?

✗ **A) The return to commodity indexes consists of two major components: the risk-free rate of return and the roll yield.**

✗ **B)** Commodity indexes are based on spot prices, while most investors purchase futures contracts.

✓ **C)** Weighting methodology varies among index providers and leads to differences in index risk and returns.

Explanation

Weighting methodology is a major issue for commodity indexes. Several different methodologies are used, including equal weighting and global production values. Differences in weighting cause differing exposures for the indexes and lead to different risk and return profiles.

Commodity indexes represent futures contracts on commodities, not the actual spot prices of commodities. Commodity index returns come from three sources: the risk-free rate of return, changes in futures prices, and the roll yield.

Question #8 of 80

Question ID: 415225

A market's efficiency is *most likely* to negatively affected by:

✗ **A) a high amount of trading activity.**

✓ **B)** a ban on short selling.

✗ **C)** substantial analyst coverage of the exchange listed companies

Explanation

Research supports the conclusion that short selling helps to prevent market prices from becoming overvalued, while limiting short selling has the opposite effect. More analyst coverage and more liquidity contribute to market efficiency.

Question #9 of 80

Question ID: 415204

Which type of security market index provides a measure of a market's overall performance and usually contains a significant portion of the market's total value?

✗ **A) Style indexes.**

✗ **B)** Sector indexes.

✓ **C)** Broad market indexes.

Explanation

A broad market index typically consists of securities that represent 90% or more of the total market capitalization for a given market. The object of a broad market index is to provide a measure for the performance of the total market. A sector index measures the returns for an industry sector such as financials. Style indexes measure the returns to strategies that are differentiated by market capitalization and by value or growth.

Question #10 of 80

Question ID: 415181

The target market for a security market index is *best* described as the:

✗ **A) consumers who will purchase the licensing rights for the index.**

✗ **B)** securities that are included in the index.

✓ **C)** market or segment the index is designed to measure.

Explanation

The target market of an index is the securities market or portion of a securities market that the index will be designed to represent. The securities from the target market that are included in the index are called its constituent securities.

Question #11 of 80

Question ID: 415193

Use the data below to determine which of the statements is *most* accurate?

As of December 31		
Company	*Stock Price*	*Shares Outstanding*
A	$25	20,000
B	$50	20,000
C	$100	10,000

✓ **A) A 100% increase in the stock price of Company A will have a smaller impact on the price-weighted index than a 100% increase in the stock price of Company C.**

✗ **B)** For a given percentage change in the stock price, Company B will have less of an impact on the market-cap weighted index as Company C.

✗ **C)** For a given percentage change in the stock price, Company A will have a greater impact on the market-cap weighted index than Companies B or C.

Explanation

A 100% change in the stock price of Company C will have a larger impact than a 100% change in either stocks A or B on the price-weighted index. A price-weighted index adds together the market price of each stock in the index and then divides this total by the number of stocks in the index. The price-weighted index assumes you purchase one share of each stock represented in the index. The price-weighted index is influenced most by given percentage changes in the higher priced stocks.

Question #12 of 80

Question ID: 415246

Which of the following statements *best* describes the overreaction effect?

✓ **A) Low returns over a three-year period are followed by high returns over the following three years.**

✗ **B)** High returns over a one-year period are followed by high returns over the following year.

✗ **C)** High returns over a one-year period are followed by low returns over the following three years.

Explanation

The overreaction effect refers to stocks with poor returns over three to five-year periods that had higher subsequent performance than stocks with high returns in the prior period. The result is attributed to overreaction in stock prices that reverses over longer periods of time. Stocks with high previous short-term returns that have high subsequent returns show a momentum effect.

Question #13 of 80

Question ID: 415206

Which of the following statements regarding bond market indexes is *least* accurate?

✗ **A) There are more bond issues than stocks.**

✓ **B)** The bond universe is more stable than the stock universe.

✗ **C)** Unlike stocks, bonds lack continuous price trading data.

Explanation

One reason why the creation of a bond index is more difficult than a stock index is due to the fact that the universe of bonds is constantly changing because of numerous new issues, bond maturities, calls, and bond sinking funds.

Question #14 of 80

Question ID: 415202

An analyst using the capital asset pricing model is *most likely* to use a security market index as a proxy for:

✓ **A) the market return.**

✗ **B)** the risk-free rate.

✗ **C)** beta.

Explanation

The return on a security market index can be used as a proxy for the market return in a pricing model such as the CAPM.

Question #15 of 80

Question ID: 415248

An investor who is more risk averse with respect to potential negative outcomes than potential positive outcomes *most likely* exhibits:

✗ **A) gambler's fallacy.**

✓ **B)** loss aversion.

✗ **C)** mental accounting.

Explanation

Loss aversion is exhibited by an investor who dislikes a loss more than he likes an equal gain. That is, the investor's risk preferences are asymmetric. Gambler's fallacy is the belief that recent past outcomes affect the probability of future outcomes. Mental accounting refers to mentally classifying investments in separate accounts rather than considering them from a portfolio perspective.

Question #16 of 80

Question ID: 415185

In a market-capitalization weighted index firms with:

✗ **A) larger market caps have lesser impacts on the index.**

✗ **B)** higher stock prices have greater impacts on the index.

✓ **C)** greater market caps have greater impacts on the index.

Explanation

In a value weighted index, firms with greater market caps have a greater impact on the index than firms with lower market caps. A higher stock price does not necessarily mean a higher market cap.

Question #17 of 80

Question ID: 415251

The idea that uninformed traders, when faced with unclear information, observe the actions of informed traders to make decisions, is referred to as:

✗ **A) herding behavior.**

✗ **B)** narrow framing.

✓ **C)** information cascades.

Explanation

"Information cascades" refers to uninformed traders watching the actions of informed traders when making investment decisions. Herding behavior is when trading occurs in clusters, not necessarily driven by information. Narrow framing refers to investors viewing events in isolation.

Question #18 of 80

Question ID: 415208

Ken Miller, CFA, wants to compare the returns on government agency bonds to the returns on corporate bonds. Peg Egan, CFA, wants to compare the returns on high yield bonds in developed markets to the returns on investment grade bonds in emerging markets. Which of these analysts is *most likely* able to use bond indexes for their analysis?

✓ **A) Both of these analysts.**

✗ **B)** Only one of these analysts.

✗ **C)** Neither of these analysts.

Explanation

Because of the wide universe of bonds that trade in financial markets, indexes are available (or can be constructed) based on virtually any feature or classification of bonds.

Question #19 of 80

Question ID: 415241

Which of the following statements *least likely* describes the role of a portfolio manager in perfectly efficient markets? Portfolio managers should:

✓ **A) quantify client's risk tolerance, communicate portfolio policies and strategies, and maintain a strict buy and hold policy avoiding any changes in the portfolio to minimize transaction costs.**

✗ **B)** construct a portfolio that includes financial and real assets.

✗ **C)** construct diversified portfolios that include international securities to eliminate unsystematic risk.

Explanation

A portfolio manager should quantify each client's risk tolerance and communicate portfolio policies and strategies. However, portfolio managers should monitor client's needs and changing circumstances and make appropriate changes to the portfolio. Adhering to a strict buy and hold policy would not be in the client's best interest. Portfolios need to be rebalanced and changed to meet client's changing needs.

Question #20 of 80

Question ID: 415232

Which of the following statements about market efficiency is *least* accurate?

✗ **A) The strong-form EMH assumes cost free availability of all information, both public and private.**

✗ **B)** The semi-strong form EMH addresses market and non-market public information.

✓ **C)** The weak-form EMH suggests that fundamental analysis will not provide excess returns while the semi-strong form suggests that technical analysis cannot achieve excess returns.

Explanation

The weak-form EMH suggests that *technical* analysis will not provide excess returns while the semi-strong form suggests that *fundamental* analysis cannot achieve excess returns. The weak-form EMH assumes the price of a security reflects all currently available *historical* information. Thus, the past price and volume of trading has no relationship with the future, hence technical analysis is not useful in achieving superior returns.

The other choices are correct. The strong-form EMH states that stock prices reflect all types of information: market, non-public market, and private. No group has monopolistic access to relevant information; thus no group can achieve excess returns. For these assumptions to hold, the strong-form assumes perfect markets - information is free and available to all.

Question #21 of 80

Question ID: 485803

Compared to a value-weighted index, the type of index *most likely* to have a value tilt is a(n):

✗ **A) price-weighted index.**

✗ **B)** equal-weighted index.

✓ **C)** fundamental-weighted index.

Explanation

An index based on company fundamentals, for example on earnings or book value, will assign more weight to stocks with low P/E or price-to-book ratios compared to a value-weighted index. This is similar to managing an equity portfolio using a value strategy.

Question #22 of 80

Question ID: 415231

The semi-strong form of efficient market hypothesis (EMH) asserts that:

✗ **A) past and future prices exhibit little or no relationship to another.**

✓ **B)** all public information is already reflected in security prices.

✗ **C)** both public and private information is already incorporated into security prices.

Explanation

Semi-strong EMH states that publicly available information cannot be used to consistently beat the market performance.

Question #23 of 80

Question ID: 415216

Which of the following equity indexes is an example of a market capitalization weighted index?

✗ **A) Nikkei Stock Average.**

✗ **B)** Dow Jones Industrial Average.

✓ **C)** MSCI All Country World Index.

Explanation

The MSCI All Country World Index is a market capitalization weighted index. The Dow Jones Industrial Average and the Nikkei Stock Average are price-weighted indexes.

Question #24 of 80

Question ID: 415223

The value of an asset that a rational investor with full knowledge about the asset's characteristics would willingly pay is *best* described as the asset's:

✓ **A) intrinsic value.**

✗ **B)** market value.

✗ **C)** theoretical value.

Explanation

Intrinsic value is the price a rational investor with full knowledge about an asset's characteristics would willingly pay for the asset.

Question #25 of 80

Question ID: 415183

Which of the following weighting schemes will produce a downward bias on the index due to the occurrence of stock splits by firms in the index?

✗ **A) Equal weighted price indicator series.**

✓ **B)** Price-weighted series.

✗ **C)** Market-cap weighted series.

Explanation

The price-weighting scheme sums the market price of each of the stocks contained in the index and then divides this sum by the number of stocks in the index. Thus if a firm executes a stock split thereby reducing its share price, this will cause a downward bias in the index.

Question #26 of 80

Question ID: 415238

Which of the following statements concerning market efficiency is *least* accurate?

✗ **A) Tests of the semi-strong form of the EMH require that security returns be risk-adjusted using a market model.**

✓ **B)** Market efficiency assumes that individual market participants correctly estimate asset prices.

✗ **C)** If weak-form market efficiency holds, technical analysis cannot be used to earn abnormal returns over the long-run.

Explanation

Market efficiency does not assume that individual market participants correctly estimate asset prices, but does assume that their estimates are unbiased. That is, some agents will over-estimate and some will under-estimate, but they will be correct, on average.

Question #27 of 80

Question ID: 415187

With regard to stock market indexes, it is *least likely* that:

✗ **A) the use of price weighting versus market value weighting produces a downward bias on the index.**

✗ **B)** buying 100 shares of each stock in a price-weighted index will result in a portfolio that tracks the index quite well.

✓ **C)** a market-cap weighted index must be adjusted for stock splits but not for dividends.

Explanation

A price-weighted index needs to be adjusted for stock splits, but a market-cap weighted index does not. Neither type of index considers dividend income unless it is designed as a total return index.

Price weighting produces a downward bias compared to market weighting because firms that split their stocks (which tend to be the more successful firms) decrease in weight within a price-weighted index. The returns on a price-weighted index can be matched by purchasing a portfolio with an equal number of shares of each stock in the index.

Question #28 of 80

Question ID: 415224

Which of the following would be *inconsistent* with an efficient market?

✗ **A) Price changes are independent.**

✓ **B)** Price adjustments are biased.

✗ **C)** Stock prices adjust rapidly to new information.

Explanation

Market efficiency assumes that investors adjust their estimates of security prices rapidly to reflect their unbiased interpretation of the new information. New information arrives randomly and independently. Therefore, price changes are independent.

Question #29 of 80

Question ID: 415227

Which of the following is NOT an assumption behind efficient capital markets?

✗ **A) New information occurs randomly, and the timing of announcements is independent of one another.**

✓ **B)** Market participants correctly adjust prices to reflect new information.

✗ **C)** Return expectations implicitly include risk.

Explanation

The set of assumptions that imply an efficient capital market includes:

- There exists a large number of profit-maximizing market participants.
- New information occurs randomly.
- Market participants adjust their price expectations rapidly (but not necessarily correctly).
- Return expectations implicitly include risk.

Question #30 of 80

Question ID: 415191

What is the price-weighted index of the following three stocks?

As of December 31, 2001		
Company	*Stock Price*	*Shares Outstanding*
A	$50	10,000

B	$35	20,000
C	$110	30,000

✗ **A) 75.**

✗ **B)** 80.

✓ **C)** 65.

Explanation

The price-weighted index equals [(50 + 35 + 110) / 3] = 65.

Question #31 of 80

Question ID: 415234

Which of the following forms of the EMH assumes that no group of investors has monopolistic access to relevant information?

✗ **A) Weak-form.**

✓ **B)** Strong-form.

✗ **C)** Both weak and semistrong form.

Explanation

The strong-form EMH assumes that stock prices fully reflect all information from public and private sources. In addition, no group of investors has monopolistic access to information relevant to the formation of prices.

Question #32 of 80

Question ID: 415244

The opportunity to take advantage of the downward pressure on stock prices that result from end-of-the-year tax selling is known as the:

✗ **A) end-of-the-year anomaly.**

✗ **B)** end-of-the-year effect.

✓ **C)** January anomaly.

Explanation

The January Anomaly is most likely the result of tax induced trading at year end. An investor can profit by buying stocks in December and selling them during the first week in January.

Question #33 of 80

Question ID: 415242

Which of the following is a limitation to fully efficient markets?

✗ **A) Information is always quickly disseminated and fully embedded in a security's prices.**

✗ **B)** There are no limitations to fully efficient markets because the trading actions of fundamental and technical analysts are continuously keeping prices at their intrinsic value.

✓ **C)** The gains to be earned by information trading can be less than the transaction costs the trading would entail.

Explanation

Market prices that are not precisely efficient can persist if the gains to be made by information trading are less than the transaction costs such trading would entail.

Question #34 of 80

Question ID: 415235

The semi-strong form of the efficient market hypothesis (EMH) asserts that stock prices:

✗ **A) fully reflect all historical price information.**

✗ **B)** fully reflect all relevant information including insider information.

✓ **C)** fully reflect all publicly available information.

Explanation

The semi-strong form of the EMH asserts that security prices fully reflect all publicly available information. This would include all historical information. The weak form relates to historical information only. The strong form relates to public and private information.

Question #35 of 80

Question ID: 415200

The *most* appropriate benchmark for measuring the relative performance of an investment manager is:

✗ **A) a broad market index.**

✓ **B)** an index that closely matches the manager's investment approach.

✗ **C)** the risk-adjusted return on the market portfolio.

Explanation

An index chosen as a benchmark for an investment manager's performance should include securities in the manager's investment universe. For example, the performance of an emerging market bond fund manager should be measured relative to the performance of an emerging market bond index.

Question #36 of 80

Question ID: 415236

Which of the following forms of the EMH assumes that no group of investors has monopolistic access to relevant information?

✗ **A) Weak-form.**

✓ **B)** Strong-form.

✗ **C)** Both weak and semistrong form.

Explanation

According to the strong-form EMH, security prices reflect all information, which includes the privately available (monopolistic) information.

Question #37 of 80

Question ID: 415190

An index was recently begun with the following two stocks:

- Company A - 50 shares valued at $2 each.
- Company B - 10 shares valued at $10 each.

Given that the value-weighted index was originally set at 100 and Company A's stock is currently selling for $4 per share while Company B's stock is still at $10 per share, what is the current value of the price-weighted index and the market-cap-weighted index?

	Price-weighted	Market-cap-weighted
✗ **A)**	**7**	**300**
✓ **B)**	7	150
✗ **C)**	8	150

Explanation

Price weight = [(4) + (10)] / 2 = 7

Market-cap weight = [(4)(50) + (10)(10)] / [(2)(50) + (10)(10)](100) = 150

Question #38 of 80

Question ID: 415249

Investor overreaction that has been documented in securities markets is *most likely* attributable to investors exhibiting:

- ✓ **A) loss aversion.**
- ✗ **B)** conservatism.
- ✗ **C)** risk aversion.

Explanation

Loss aversion refers to the tendency for investors to dislike downside risks more than upside risks creating asymmetrical risk preferences. This dislike of losses may be a cause of investor overreaction. The standard economic notion of risk aversion assumes symmetric risk preferences. Conservatism is the behavioral bias whereby investors react slowly to new information and is unlikely to cause overreaction.

Questions #39-40 of 80

The table below lists information on price per share and shares outstanding for three companies-Lair Enterprises, Kurlew, Inc., and Mowe, Ltd.

	As of Beginning of Year	*As of End of Year*

Stock	Price Per Share ($)	# Shares Outstanding	Price Per Share ($)	# Shares Outstanding
Lair	15	10,000	10	10,000
Kurlew	45	5,000	60	5,000
Mowe	90	500	110	500

Question #39 of 80

Question ID: 415195

Assume that at the beginning of the year, the value of the market-weighted index was 100. The one-year return on the market-cap weighted index is *closest* to:

✗ **A) 30.0%.**

✓ **B)** 8.33%.

✗ **C)** 13.33%.

Explanation

Expand the table as follows:

	As of Beginning of Year 1			As of End of Year 1		
Stock	Price Per Share (in $)	# Shares Outstanding	Market Capitalization (in $)	Price Per Share (in $)	# Shares Outstanding	Market Capitalization (in $)
Lair	15	10,000	150,000	10	10,000	100,000
Kurlew	45	5,000	225,000	60	5,000	300,000
Mowe	90	500	45,000	110	500	55,000
Total	*150*		*420,000*	*170*		*455,000*

First, we will calculate the year-end market-cap weighted index value, then we will calculate the return percentage.

Value of market-cap weighted index = [(market capitalization$_{\text{year-end}}$) / (market capitalization$_{\text{beginning of year}}$)] × Beginning index value

= (455,000 / 420,000) × 100 = 108.33

One-Year Return = [(Index value$_{\text{year-end}}$ / Index value$_{\text{beginning of year}}$) − 1] × 100

= [(108.33 / 100) − 1] × 100 = **8.33%**.

Question #40 of 80

Question ID: 415196

If the stocks in the table above are used to create a stock market index, it is *least likely* that:

✗ **A) a price-weighted index will have a downward bias compared to a value-weighted index.**

✗ **B)** a 5% change in the price of Kurlew would have a greater impact on a value-weighted index than a 5% change in the prices of either Lair or Mowe.

✓ **C)** an investor creating a price-weighted index using these three stocks would need to rebalance his portfolio at year-end to reflect the price changes.

Explanation

A *price-weighted index* assumes that the investor holds an equal number of shares of each stock in the index. Since the number of stocks did not change, the investor would *not* need to change his holdings.

The other statements are true. A market value weighted index is most influenced by the stock with the largest market capitalization (Kurlew) and does not need to be adjusted for stock splits. A price-weighted index has a built-in downward bias because of the impact of stock splits. After a stock split, the denominator is adjusted downward to keep the index at the same level as before the split. Since high-growth companies tend to announce stock splits more frequently than low-growth companies, the larger, more successful firms lose influence on the index.

Question #41 of 80

Question ID: 415250

In behavioral finance theory, how is loss aversion *most accurately* defined? For gains and losses of equal amounts, investors:

✗ **A) dislike for losses and like for gains are proportionate.**

✗ **B)** like gains more than they dislike losses.

✓ **C)** dislike losses more than they like gains.

Explanation

Behavioral finance proposes that investors are loss averse. Loss aversion means investors dislike losses more than they like gains of the same amount.

Question #42 of 80

Question ID: 415201

Contreras Fund is a mutual fund that invests in value stocks. The *most appropriate* type of equity index to use as a benchmark of manager performance for Contreras Fund is a:

✗ **A) broad market index.**

✗ **B)** sector index.

✓ **C)** style index.

Explanation

The index selected as a benchmark for manager performance should represent the investment universe from which the manager actually selects stocks. If the manager only invests in value stocks, then the most appropriate index is a style index that seeks to represent the returns from a value strategy. A sector index is appropriate for managers who invest in specific sectors (e.g., technology stocks, emerging market bonds).

Question #43 of 80

Question ID: 415240

In a perfectly efficient market, portfolio managers should do all of the following EXCEPT:

✗ **A) monitor their client's needs and circumstances.**

✓ **B)** diversify to eliminate systematic risk.

✗ **C)** quantify their risk and return needs within the bounds of the client's liquidity, income, time horizon, legal, and regulatory constraints.

Explanation

Portfolio managers cannot eliminate systematic risk (i.e., market risk) thru the use of diversification. Portfolio managers should try to eliminate unsystematic portfolio risk.

Question #44 of 80

Question ID: 415221

The measure of an asset's value that can *most likely* be determined without estimation is its:

✓ **A) market value.**

✗ **B)** fundamental value.

✗ **C)** intrinsic value.

Explanation

The current price of a traded asset is its market value. An asset's intrinsic or fundamental value is the price a rational investor with complete information about the asset would pay for it.

Question #45 of 80

Question ID: 415192

What is the market-cap weighted index of the following three stocks assuming the beginning index value is 100 and a base value of $150,000?

As of December 31		
Company	*Stock Price*	*Shares Outstanding*
X	$1	5,000
Y	$20	2,500
Z	$60	1,000

✓ **A) 77.**

✗ **B)** 100.

✗ **C)** 30.

Explanation

The market-cap weighted index = [(($1)(5,000) + ($20)(2,500) + ($60)(1,000))/$150,000](100)

= ($115,000/$150,000)(100)

= (0.767)(100)

= 76.67 or 77

Question #46 of 80

Question ID: 415219

In an informationally efficient market:

✗ **A) the conditions exist for active investment strategies to achieve superior risk-adjusted returns.**

✗ **B)** share prices adjust rapidly when companies announce results in line with expectations.

✓ **C)** buying and holding a broad market portfolio is the preferred investment strategy.

Explanation

If financial markets are informationally efficient, active investment strategies cannot consistently achieve risk-adjusted returns superior to holding a passively managed index portfolio. In addition, a passive investment strategy has lower transactions costs than an active management strategy. Share prices should not adjust when a company announces results in line with expectations in an informationally efficient market, because the market price already reflects the expected results.

Question #47 of 80

Question ID: 415217

An efficient capital market:

✓ **A) fully reflects all of the information currently available about a given security, including risk.**

✗ **B)** does not fully reflect all of the information currently available about a given security, including risk.

✗ **C)** fully reflects all of the information currently available about a given security, excluding risk.

Explanation

An efficient capital market fully reflects all of the information currently available about a given security, including risk.

Question #48 of 80

Question ID: 415207

Which of the following is NOT a reason bond market indexes are more difficult to create than stock market indexes?

✗ **A) The universe of bonds is much broader than that of stocks.**

✓ **B)** Bond deviations tend to be relatively constant.

✗ **C)** There is a lack of continuous trade data available for bonds.

Explanation

Bond prices are quite volatile as measured by the bond's duration.

Question #49 of 80

Question ID: 415186

Which of the following statements about indexes is CORRECT?

✓ **A) A price-weighted index assumes an equal number of shares (one of each stock) represented in the index.**

✗ **B)** A market weighted series must adjust the denominator to reflect stock splits in the sample over time.

✗ **C)** An equal weighted index assumes a proportionate market value investment in each company in the index.

Explanation

The descriptions of value weighted and unweighted indexes are switched. The denominator of a price-weighted index must be adjusted to reflect stock splits and changes in the sample over time. A market value-weighted series assumes you make a

proportionate market value investment in each company in the index.

Question #50 of 80

Question ID: 415212

Voluntary reporting of performance by hedge fund managers leads to:

✗ **A) a downward bias in hedge fund index returns.**

✗ **B)** no appreciable bias in hedge fund index returns.

✓ **C)** an upward bias in hedge fund index returns.

Explanation

Empirical studies have shown that since hedge fund managers have the option to report performance results only funds with good results will report. Since funds with poor performance do not report their results, the results of hedge fund indexes will be biased upwards.

Question #51 of 80

Question ID: 415203

An equity index comprised of value stocks, identified by their price-to-earnings ratios, is *best* described as a:

✗ **A) sector index.**

✓ **B)** style index.

✗ **C)** fundamental weighted index.

Explanation

An index of value stocks is an example of a style index. Sector indexes measure the performance of securities in specific industries or industry sectors. Fundamental weighting is used to weight indexes by a factor such as the size of the firms or economies represented in the index.

Question #52 of 80

Question ID: 415247

If the momentum effect persists over time, it would provide evidence against which of the following forms of market efficiency?

✗ **A) Weak form only.**

✓ **B)** Both weak form and semistrong form.

✗ **C)** Semistrong form only.

Explanation

The momentum effect suggests it is possible to earn abnormal returns using market data. All three forms of market efficiency (weak form, semistrong form, and strong form) assume that market prices fully reflect market data.

Question #53 of 80

Question ID: 415220

Hume Inc. announces fourth quarter earnings per share of $1.20, which is 15% higher than last year. Hume's earnings are equal to the consensus analyst forecast for the quarter. Assuming markets are efficient, the announcement will *most likely* cause the

price of Hume's stock to:

✗ **A) decrease.**

✗ **B)** increase.

✓ **C)** remain the same.

Explanation

An efficient capital market would price Hume's stock based on the expectation for earnings per share. Since actual earnings equal expected earnings, the stock price should not change as a result of the announcement.

Question #54 of 80

Question ID: 415245

Which of the following would provide evidence *against* the semistrong form of the efficient market theory?

✗ **A) Trend analysis is worthless in determining stock prices.**

✗ **B)** All investors have learned to exploit signals related to future performance.

✓ **C)** Low P/E stocks tend to have positive abnormal returns over the long run.

Explanation

P/E information is publicly available information and therefore this test relates to the semistrong-form EMH. Trend analysis is based on historical information and therefore relates to the weak-form EMH. In an efficient market one would expect 50% of pension fund managers to do better than average and 50% of pension fund managers to do worse than average. If all investors exploit the same information no excess returns are possible.

Question #55 of 80

Question ID: 415226

An increase in which of the following factors would *most likely* improve a market's efficiency?

✗ **A) Bid-ask spreads.**

✗ **B)** Restrictions on short selling.

✓ **C)** Number of participants.

Explanation

As the number of market participants increases, the speed at which markets adjust to new information is likely to increase. Restrictions on short selling limit the ability of arbitrage to correct pricing anomalies. High bid-ask spreads increase transaction costs and decrease efficiency.

Question #56 of 80

Question ID: 415175

In one year, a security market index has the following quarterly price returns:

First quarter	3%
Second quarter	4%
Third quarter	-2%
Fourth quarter	5%

The price return for the year is *closest to*:

✗ **A) 9.9%.**

✓ **B)** 10.2%.

✗ **C)** 10.0%

Explanation

Return for the year = (1.03)(1.04)(0.98)(1.05) − 1 = 10.23%.

Question #57 of 80

Question ID: 415243

David Farrington is an analyst at Farrington Capital Management. He is aware that many people believe that the capital markets are fully efficient. However, he is not convinced and would like to disprove this claim. Which of the following statements would support Farrington in his effort to demonstrate the limitations to fully efficient markets?

✗ **A) Stock prices adjust to their new efficient levels within hours of the release of new information.**

✓ **B)** Processing new information entails costs and takes at least some time, so security prices are not always immediately affected.

✗ **C)** Technical analysis has been rendered useless by many academics who have shown that analyzing market trends, past volume and trading data will not lead to abnormal returns.

Explanation

If market prices are efficient there are no returns to the time and effort spent on fundamental analysis. But if no time and effort is spent on fundamental analysis there is no process for making market prices efficient. To resolve this apparent conundrum one can look to the time lag between the release of new value-relevant information and the adjustment of market prices to their new efficient levels. Processing new information entails costs and takes at least some time, which is a limitation of fully efficient markets.

Question #58 of 80

Question ID: 415214

Which of the following sets of indexes are price-weighted?

✗ **A) S&P 500 Index and Dow Jones Industrial Average.**

✗ **B)** Dow Jones World Stock Index and Russell Index.

✓ **C)** Dow Jones Industrial Average and Nikkei Dow Jones Stock Market Average.

Explanation

The Dow Jones World Stock Index, the Russell Index, the S&P 500 Index, and Morgan Stanley Capital International Index are all market-value weighted. Only the Dow Jones Industrial Average and the Nikkei Dow Jones Stock Market Averages are price-weighted.

Question #59 of 80

Question ID: 415229

The statement, "Stock prices fully reflect all information from public and private sources," can be attributed to which form of the efficient

market hypothesis (EMH)?

✗ **A) Semistrong-form EMH.**

✓ **B)** Strong-form EMH.

✗ **C)** Weak-form EMH.

Explanation

This is the definition of the strong-form EMH. Private sources include insider information, such as persons holding monopolistic access to information relevant to the formation of prices.

Question #60 of 80

Question ID: 415199

When a security is added to a widely followed market index, the security's price is *most likely* to:

✗ **A) decrease.**

✗ **B)** be unaffected.

✓ **C)** increase.

Explanation

Adding a security to a market index typically causes an increase in that security's price as portfolio managers who track the index purchase the security.

Question #61 of 80

Question ID: 415177

The value of a total return index:

✓ **A) can be calculated by multiplying the beginning value by the geometrically linked series of periodic total returns.**

✗ **B)** is determined by the price changes of the securities that constitute the index.

✗ **C)** may increase at either a faster or slower rate than the value of a price return index with the same constituent securities and weights.

Explanation

The value of a total return index can be calculated by multiplying the beginning value by the geometrically linked series of index total returns. The value of a total return index includes both the price changes of the securities that constitute the index and any cash flows from the securities (dividends, interest, and other distributions). A total return index cannot increase at a slower rate (or decrease at a faster rate) than an otherwise identical price return index because cash flows from the securities cannot be negative.

Question #62 of 80

Question ID: 415198

The providers of the Smith 30 Stock Index remove Jones Company from the index because it has been acquired by another firm, and replace it with Johnson Company. This change in the index is *best* described as an example of:

✓ **A) reconstitution.**

✗ **B)** rebalancing.

✗ **C)** redefinition.

Explanation

Reconstitution refers to changing the securities that make up an index. Reconstitution of an index is required if one of its constituent securities goes out of existence (for example, a maturing bond or an expiring futures contract) or no longer meets the requirements to be included in the index.

Question #63 of 80

Question ID: 415215

Equal weighting is the most common weighting methodology for indexes of which of the following types of assets?

✗ **A) Equities.**

✗ **B)** Fixed income securities.

✓ **C)** Hedge funds.

Explanation

Most hedge fund indexes are equal-weighted. Equity and fixed income indexes are predominately market capitalization weighted.

Question #64 of 80

Question ID: 415197

Reconstitution of an index refers to:

✗ **A) adjusting the weights of the securities that constitute the index.**

✗ **B)** changing the methodology used to calculate the value of the index.

✓ **C)** removing some securities from the index and adding others.

Explanation

Reconstitution begins with evaluating the securities in an index against the index's criteria. Securities that are no longer representative of the index are removed and replaced with different securities that do meet the criteria. Adjusting the weights of the securities that constitute an index is termed rebalancing.

Question #65 of 80

Question ID: 415210

Commodity price indexes are based on the prices of:

✗ **A) real assets such as grains, oil, and precious metals.**

✓ **B)** futures contracts.

✗ **C)** commodities.

Explanation

The constituent securities of commodity price indexes are commodity futures contracts. As a result, the return on a commodity index can be different than the returns from holding the constituent commodities themselves.

Question #66 of 80

Question ID: 415218

The implication of efficient capital markets and a lack of superior analysts have led to the introduction of:

✗ **A) futures options.**

✓ **B)** index funds.

✗ **C)** balanced funds.

Explanation

An index fund is designed to duplicate the composition of a specific index series or market segment. There is a strong argument suggesting that portfolio managers cannot beat the market after fees, therefore an index fund should be used to try to match the market.

Question #67 of 80

Question ID: 415174

A security market index is *best* described as a:

✗ **A) value used to adjust nominal security prices for the effects of inflation.**

✗ **B)** directory of ticker symbols for the securities listed on a given market.

✓ **C)** group of securities selected to represent the performance of a security market.

Explanation

A security market index is a group of securities (the constituent securities) designed to represent the performance of an asset class, security market, or market segment.

Question #68 of 80

Question ID: 415180

The first step in developing a security market index is choosing the index's:

✗ **A) constituent securities.**

✓ **B)** target market.

✗ **C)** weighting method.

Explanation

The first decision that must be made is choosing the target market the index will represent. Only then can the index provider determine which constituent securities should be included and which weighting scheme is most appropriate to measure the target market's returns.

Question #69 of 80

Question ID: 485802

Six months after inception, the price return and the total return of an equal-weighted index will be different if:

✗ **A) capital gains exceed capital losses or vice versa.**

✓ **B)** constituent securities have paid dividends.

✗ **C)** market prices have not changed.

Explanation

The difference between a price and total return index is that cash distributions are included in a total return index. The two will differ when the constituent securities make cash distributions over the period. Otherwise, the two versions will be the same.

Question #70 of 80

Question ID: 415176

The measure of return on a security market index that includes any dividends or interest paid by the securities in the index is known as the:

✗ **A) cash flow return.**

✗ **B)** price return.

✓ **C)** total return.

Explanation

The total return on a security market index includes cash flows from the securities (dividends and interest) as well as price changes.

Question #71 of 80

Question ID: 415178

An index provider maintains a price index and a total return index for the same 40 stocks. Assuming both indexes begin the year with the same value, the total return index at the end of the year will be:

✗ **A) less than the price index if the price index increases and greater than the price index if the price index decreases.**

✓ **B)** equal to the price index if the constituent stocks do not pay dividends.

✗ **C)** greater than the price index.

Explanation

A price index only includes the prices of the constituent securities in the calculation of the index value. A total return index includes the prices and the dividends paid in the calculation of the index value. If all of the constituents are non-dividend paying stocks, then the total return index will be the same as the price index at the end of the year. Otherwise the total return index will be greater than the price index.

Question #72 of 80

Question ID: 415213

Which of the following indexes is a price weighted index?

✗ **A) The New York Stock Exchange Index.**

✓ **B)** The Nikkei Dow Index.

✗ **C)** The Standard and Poor's Index.

Explanation

The Nikkei Dow Index is a price-weighted index. The other two are market value-weighted indexes.

Question #73 of 80

Question ID: 415188

James Investments is calculating an equally weighted index on a four stock portfolio.

Stock	*Number of Shares*	*Initial Cost*	*Current Cost*
W	100	5.00	5.00
X	1,000	10.00	12.50
Y	500	7.50	10.00
Z	1500	5.00	8.00

If the initial index value is 100, the current index is *closest* to:

✗ **A) 137.9.**

✓ **B)** 129.5.

✗ **C)** 142.6.

Explanation

First calculate the return relatives and then find the mean of the relatives. The number of shares is irrelevant in this question.

5/5 = 1
12.5/10 = 1.25
10/7.50 = 1.33
8/5 = 1.60

(1 + 1.25 + 1.33 + 1.60) / 4 = 1.295
100 × 1.295 = 129.5

Question #74 of 80

Question ID: 415209

Which of the following statements regarding fixed income indexes is *most accurate*?

✗ **A) Compared to stock indexes, turnover is typically lower in fixed income indexes.**

✗ **B)** It is typically easier for portfolio managers to replicate a fixed income index than an equity index.

✓ **C)** Because some fixed income securities are illiquid, indexes may include estimates of value.

Explanation

Because some fixed income securities are illiquid, a lack of recent trade prices may result in indexes having to estimate values. Unlike stocks, bonds mature and must be replaced in fixed income indexes. As a result turnover is higher in fixed income indexes. Illiquidity, transaction costs, and high turnover make it more expensive and difficult for a portfolio manager to replicate a fixed income index than a stock index.

Question #75 of 80

Question ID: 415237

If the efficient markets hypothesis is true, portfolio managers should do all of the following EXCEPT:

✗ **A) Minimize transaction costs.**

✓ **B)** Spend more time working on security selection.

✗ **C)** Work more with clients to better quantify their risk preferences.

Explanation

In an efficient market all stocks are properly priced and reflect all publicly available information. Therefore, individual selection of stocks is not important the only thing that is relevant is the portfolio's beta.

Question #76 of 80

Question ID: 415230

The strong-form efficient market hypothesis (EMH) asserts that stock prices fully reflect which of the following types of information?

✗ **A) Public, private, and future.**

✓ **B)** Public and private.

✗ **C)** Market.

Explanation

The strong-form EMH assumes that stock prices fully reflect all information from public and private sources.

Question #77 of 80

Question ID: 415228

Which of the following statements on the forms of the efficient market hypothesis (EMH) is *least* accurate?

✗ **A) The strong-form EMH assumes perfect markets.**

✗ **B)** The semi-strong form EMH addresses market and non-market public information.

✓ **C)** The weak-form EMH states that stock prices reflect current public market information and expectations.

Explanation

The weak-form EMH assumes the price of a security reflects all currently available *historical* information. Thus, the past price and volume of trading has no relationship with the future, hence technical analysis is not useful in achieving superior returns.

The other statements are true. The strong-form EMH states that stock prices reflect all types of information: market, non-public market, and private. No group has monopolistic access to relevant information; thus no group can achieve excess returns. For these assumptions to hold, the strong-form assumes perfect markets - information is free and available to all.

Question #78 of 80

Question ID: 415184

Which of the following statements *best* describes the investment assumption used to calculate an equal weighted price indicator series?

✓ **A) An equal dollar investment is made in each stock in the index.**

✗ **B)** A proportionate market value investment is made for each stock in the index.

✗ **C)** An equal number of shares of each stock are used in the index.

Explanation

An equal weighted price indicator series assumes that an equal dollar investment is made in each stock in the index. All stocks carry equal weight regardless of their price or market value.

Question #79 of 80

Question ID: 415182

Assume a stock index consists of many firms who have recently split their stock. Which of the following weighting schemes will see a bias due to the impact of stock splits?

✓ **A) Price-weighted series.**

✗ **B)** Unweighted price series.

✗ **C)** Market value-weighted series.

Explanation

Firms that split their stock price will have the identical weight before and after the split in both the unweighted and the market value-weighted series. However, in the price-weighted series, large successful firms will lose weight within the index due to simply splitting their stock. This creates a downward bias in a price-weighted series. Standard and Poor's 500 Index is a market value-weighted index.

Question #80 of 80

Question ID: 485804

Octagon Advisors believes that the market is semi-strong efficient. The firm's portfolio managers *most likely* will use:

✗ **A) an enhanced indexing strategy that relies on trading patterns.**

✗ **B)** active portfolio management strategies.

✓ **C)** passive portfolio management strategies.

Explanation

If the market is semi-strong efficient, portfolio managers should use passive management because neither technical analysis nor fundamental analysis will generate positive abnormal returns on average over time.