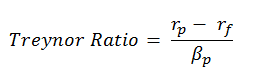
**Solution to Self-Assessment #3**

**Question 1. Suppose two portfolios have the same average return, the same standard deviation of returns, but portfolio A has a higher beta than portfolio B. According to the Treynor measure, the performance of portfolio A \_\_\_\_\_\_\_\_\_\_.**

1. is better than the performance of portfolio B
2. is the same as the performance of portfolio B
3. is poorer than the performance of portfolio B
4. cannot be measured as there is no data on the alpha of the portfolio

Answer 1. (C)



Explanation:

Higher the Beta, lesser is the Treynor ratio. Therefore, A is a poorer performer as compared to B.

**Question 2. A trader sends a market order to buy 1000 shares in the following limit-order book:**

**Her average fill price is:**

1. 124.20
2. 124.30
3. 124.65
4. 124.70

Answer 2. (D)

Explanation:

|  |  |
| --- | --- |
| Price | Share |
| 124.3 | 0.4 |
| 124.9 | 0.2 |
| 125 | 0.4 |
| Average Price | **124.7** |

**Question 3. Suppose that you invest $10,000 into a Home Depot stock and incur a 0.60% fee when you buy. Shares than rise 8% and you sell incurring another cost of 0.80%. What is your net return?**

1. 6.73%
2. 5.00%
3. 6.49%
4. 3.20%

Answer 3. (C)

Explanation:

|  |  |
| --- | --- |
| Initial Value | 10000 |
| Value after 0.6% Fee | 9940 |
| Value after 8% price raise | 10735.2 |
| Value after 0.8% Fee | 10649.3184 |
|  | **6.49%** |

**Question 4. Which one is not one of the types of market efficiency?**

1. Weak form
2. Semi-weak form
3. Semi-strong form
4. Strong form
5. All the above are types of market efficiency

Answer 4. (B)

Explanation: While Weak, Semi-Strong and Strong exists, Semi-Weak is not a defined form.

**Question 5. One way mentioned in video to test the market efficiency is:**

1. Compare the performance of professionally managed mutual funds with the performance of an individual investor
2. Compare the performance of professionally managed mutual funds with the performance of a market index

Answer 5. (B)

Explanation: 5. Check slide page 16. One way to check market efficiency is to compare the US equity funds with passive benchmark.

**Question 6. Which one is incorrect about efficient market**

1. Efficient markets are the result of intense competition
2. In an efficient market, security prices adjust rapidly to infusion of new information, and therefore current security prices fully reflect all available information
3. Average returns of a mutual-fund manager is the same as those of average investor in the market as a whole
4. There should be possibility to consistently generate alpha or to outperform a passive benchmark in an efficient market

Answer 6. (D)

Explanation: If markets are efficient, it shouldn’t be possible to consistently generate alpha since arbitrage is not possible when information travels

**Question 7. Which one is investor’s behavioral bias:**

1. Anchoring
2. Loss aversion
3. Recency effect
4. Overconfidence
5. All the above

Answer 7. (E)

Explanation: Check slide page 19. Some examples of behavioral biases are: overconfidence, loss aversion, recency effect and anchoring.

**Question 8. Market can be perfectly efficient.**

1. True
2. False

Answer 8. (B)

Explanation: If they were, there would be no incentive to collect information. And there’s also a lot of evidence on behavioral biases and failure of market efficiency

**Question 9. Which of the following statements is(are) true if the efficient market hypothesis holds?**

1. It implies perfect forecasting ability
2. It implies the market is irrational and prices follow a particular pattern
3. It implies that prices reflect all available information

Answer 9. (C)

Explanation: Check the definition of Efficient Markets. An efficient capital market is one in which stock prices fully reflect available information.

**Question 10. The weak form of the efficient market hypothesis implies that**

1. Security prices reflect all information found in past prices and volume
2. Past price changes can be used to predict future price changes
3. Only major market events can be predicted
4. Security prices reflect all publicly available information

Answer 10. (A)

Explanation: Weak Form - Security prices reflect all information found in past prices and volume (definition from slide)