

*Solution*

1. Which of the following has not been found in studies of individual investors?
  - a. Individual investors, on average, under perform the overall market.
  - b. The more individuals trade, the lower the returns they make.
  - c. Pooling the talents of individual investors in investment clubs improves return performance.**
  - d. Less diversified investors deliver higher returns than more diversified investors.
  - e. Investors who invest in companies that are close to home do better than other investors.

*Explanation: There is evidence backing all of the other statements, but the evidence is contrary to (c). Investment clubs do not deliver better performance than individual investors.*

2. The Jensen study in the late 1960s was the first to take a comprehensive look at the risk-adjusted returns at mutual funds. Which of the following conclusions did that study come to?
  - a. Mutual funds, on average, earn higher returns than the rest of the market on a risk-adjusted basis.
  - b. Mutual funds, on average, earn about the same returns as the rest of the market on a risk-adjusted basis.
  - c. Mutual funds, on average, earn lower returns than the rest of the market on a risk-adjusted basis.**

*Explanation: About 60% of the funds delivered lower returns than the market on a risk-adjusted basis and the average risk-adjusted return across funds was about 1% lower than the market.*

3. In response to the findings in the Jensen study, mutual fund managers have defended themselves using a variety of rationale. Which one of the following reasons offered by mutual funds for the under performance is backed by the evidence?
  - a. If you use a different risk and return model to compute risk adjusted returns, mutual funds beat the market.
  - b. If you incorporate the mutual funds that don't survive into the sample, mutual fund returns look much better.
  - c. Mutual funds that invest in small cap stocks or emerging markets beat the market on a risk-adjusted basis.
  - d. Older, more seasoned funds do better than the market. It is the younger funds that cause the under performance.
  - e. None of the above**

*Explanation: None of the explanations hold up. Mutual funds in every grouping under perform the market and adding in the non-surviving funds makes the under performance worse.*

4. Assume that you have a million dollars to invest and expect the market to generate an 8% return on an annual basis for the next ten years. If mutual funds, on average, deliver 1% less than the market and you invest in an average-risk, load fund with a load of 2% (the fund takes 2% of your investment up front), how much less money will you have from investing in this load fund at the end of ten years than you would have investing in an index fund over the same period?
- \$ 43,179
  - \$130,000
  - \$191,774
  - \$231,117**
  - None of the above

*Explanation: Expected value in index fund = 1,000,000 (1.08)<sup>10</sup> = \$2,158,925*

*Expected value in load fund = 1,000,000 (1-.02) (1.07)<sup>10</sup> = \$1,927,808*

*Loss in value = \$2,158,925 - \$1,927,808 = \$ 231,117*

5. It is puzzling that active money management does not pay off more in less efficient emerging markets. Which of the following may explain this phenomenon?
- It is more difficult and costly to access and collect information in emerging markets.
  - The markets are less liquid, leading to higher transactions costs/brokerage expenses.
  - Trading on stocks can cause a much larger price impact in emerging markets.
  - Mispricing in stocks may persist longer in emerging markets.
  - All of the above.**

*Explanation: Emerging markets may offer more mispriced assets, but the transactions costs and other market frictions are also higher.*