

14 RULES FOR WRITING MULTIPLE-CHOICE QUESTIONS

1. Use Plausible Distractors (wrong-response options)

- Only list plausible distractors, even if the number of options per question changes
- Write the options so they are homogeneous in content
- Use answers given in previous open-ended exams to provide realistic distractors

2. Use a Question Format

- Experts encourage multiple-choice items to be prepared as questions (rather than incomplete statements)

Incomplete Statement Format:

The capital of California is in _____ ← Less Effective

Direct Question Format:

In which of the following cities is the capital of California? ← More Effective

3. Emphasize Higher-Level Thinking

- Use memory-plus application questions. These questions require students to recall principles, rules or facts in a real life context.
- The key to preparing memory-plus application questions is to place the concept in a life situation or context that requires the student to first recall the facts and then apply or transfer the application of those facts into a situation.
- Seek support from others who have experience writing higher-level thinking multiple-choice questions.

EXAMPLES:

Memory Only Example

Which description best characterizes whole foods?

- a. orange juice
- b. toast
- c. bran cereal
- d. grapefruit

← Less Effective

Memory-Plus Application Example

← Effective

Sally's breakfast this morning included one glass of orange juice (from concentrate), one slice of toast, a small bowl of bran cereal and a grapefruit. What "whole food" did Sally eat for breakfast?

- a. orange juice
- b. toast
- c. bran cereal
- d. grapefruit

Memory-Plus Application Example

← Effective

Which one of the following best illustrates the law of diminishing returns?

- a. The demand for a farm product increased faster than the supply of the product.
- b. The population of a country increased faster than the means of subsistence.
- c. A machine decreased in utility as its parts became worn.
- d. A factory doubled its labor force and increased production by 50 percent.

Ability to Interpret Cause-and-Effect Relationships Example

← Effective

Why does investing money in common stock protect against loss of assets during inflation?

- a. It pays higher rates of interest during inflation.
- b. It provides a steady but dependable income despite economic conditions.
- c. It is protected by the Federal Reserve System.
- d. It increases in value as the value of a business increases.

Ability to Justify Methods and Procedures Example

← Effective

Why is adequate lighting necessary in a balanced aquarium?

- a. Fish need light to see their food.
- b. Fish take in oxygen in the dark.
- c. Plants expel carbon dioxide in the dark.
- d. Plants grow too rapidly in the dark.

3. Emphasize Higher-Level Thinking (continued)

Faculty Comment:

“I had previously thought that these higher-level questions would require a lot more work than they do. I also enjoy being more creative as I cast the topic into a unique setting that requires my students not only to recall but also to apply concepts. However, what has surprised me most is how much more my students ‘enjoy’ higher-level assessment questions than recall questions. ”

4. Keep Option Lengths Similar

- Avoid making your correct answer the long or short answer

5. Balance the Placement of the Correct Answer

- Correct answers are usually the second and third option

6. Be Grammatically Correct

- Use simple, precise and unambiguous wording
- Students will be more likely to select the correct answer by finding the grammatically correct option

7. Avoid Clues to the Correct Answer

- Avoid answering one question in the test by giving the answer somewhere else in the test
- **Have the test reviewed by someone who can find mistakes, clues, grammar and punctuation problems before you administer the exam to students**
- Avoid extremes – never, always, only
- Avoid nonsense words and unreasonable statements

8. Avoid Negative Questions

- 31 of 35 testing experts recommend avoiding negative questions
- Students may be able to find an incorrect answer without knowing the correct answer

9. Use Only One Correct Option (Or be sure the best option is clearly the best option)

- The item should include one and only one correct or clearly best answer
- With one correct answer, alternatives should be mutually exclusive and not overlapping
- Using MC with questions containing more than one right answer lowers discrimination between students

10. Give Clear Instructions

Such as:

Questions 1 - 10 are multiple-choice questions designed to assess your ability to remember or recall basic and foundational pieces of knowledge related to this course. Please read each question carefully before reading the answer options. When you have a clear idea of the question, find your answer and mark your selection on the answer sheet. Please do not make any marks on this exam.

Questions 11 – 20 are multiple-choice questions designed to assess your ability to think critically about the subject. Please read each question carefully before reading the answer options. Be aware that some questions may seem to have more than one right answer, but you are to look for the one that makes the most sense and is the *most correct*. When you have a clear idea of the question, find your answer and mark your selection on the answer sheet. You may justify any answer you choose by writing your justification on the blank paper provided.

11. Use Only a Single, Clearly-Defined Problem and Include the Main Idea in the Question

- Students must know what the problem is without having to read the response options

12. Avoid the “All the Above” Option

- Students merely need to recognize two correct options to get the answer correct

13. Avoid the “None of the Above” Option

- You will never know if students know the correct answer

14. Don’t Use MC Questions When Other Item Types Are More Appropriate

- limited distractors or assessing problem-solving and creativity



Ask Questions

Questions You Should Ask
About Your Investments



OFFICE *of* INVESTOR
EDUCATION *and* ADVOCACY

Information is an investor's best tool

Ask Questions

That's the best advice we can give you about how to invest wisely. We see too many investors who might have avoided trouble and losses if they had asked basic questions from the start.

We encourage you to thoroughly evaluate the background of any financial professional with whom you intend to do business—before you hand over your hard-earned cash.

It doesn't matter if you are a beginner or have been investing for many years, it's never too early or too late to start asking questions. It's almost impossible to ask a dumb question about how you are investing your money. Don't feel intimidated. Remember, it's *your* money at stake. You are paying for the assistance of a financial professional.

A good financial professional will welcome your questions, no matter how basic. Financial professionals know that an educated client is an asset, not a liability. They would rather answer your questions before you invest, than confront your anger and confusion later.

In this brochure, you'll find some questions that you should ask about investment products, the people who sell those products, and the people who provide investment advice to you. We've also included some tips on how to monitor your investments and handle any problems.

Keep this brochure on hand when considering an investment and *use* it by asking the right questions before you buy. Have a pen and piece of paper ready to take notes on the answers. They can come in handy if there is a dispute later about what was said during the transaction. Taking notes also sends a signal to your financial professional: I'm a smart and serious investor who wants to know more about the risks and rewards of investing.

Investor Tip

Which financial professional you select is very important for several reasons. You'll want to investigate thoroughly before doing business with a financial professional or firm that has a history of complaints or problems with regulators. Also, you should know that if your financial professional or his or her firm goes out of business or declares bankruptcy, you might not be able to recover your money—even if an arbitrator or a court rules in your favor.

Questions About Products

- Is this investment product registered with the SEC and my state securities agency?
- Does this investment match my investment goals? Why is this investment suitable for me?
- How will this investment make money? (Dividends? Interest? Capital gains?) Specifically, what must happen for this investment to increase in value? (For example, increase in interest rates, real estate values, or market share?)
- What are the total fees to purchase, maintain, and sell this investment? Are there ways that I can reduce or avoid some of the fees that I'll pay, such as purchasing the investment directly? After all the fees are paid, how much does this investment have to increase in value before I break even?

- How liquid is this investment? How easy would it be to sell if I needed my money right away?
- What are the specific risks associated with this investment? What is the maximum I could lose? (For example, what will be the effect of changing interest rates, economic recession, high competition, or stock market ups and downs?)
- How long has the company been in business? Is its management experienced? Has management been successful in the past? Have they ever made money for investors before?
- Is the company making money? How are they doing compared to their competitors?
- Where can I get more information about this investment? Can I get the latest reports filed by the company with the SEC: a prospectus or offering circular, or the latest annual report and financial statements?

FOR MUTUAL FUNDS

- How has this fund performed over the long run? Where can I get an independent evaluation of this fund?
- What specific risks are associated with this fund?
- What type of securities does the fund hold? How often does the portfolio change?
- Does this mutual fund invest in any type of securities that could cause the value to go up or down rapidly in a short period of time? (For example, derivatives?)
- How does the fund perform compared to other funds of the same type or to an index of the same type of investment?
- How much will the fund charge me when I buy shares? What ongoing fees are charged? How much will the fund charge me when I sell shares?
- Is the fund portable? If I move my assets to another firm, will I be able to continue holding the fund or will I need to liquidate it?

Investor Tip

You can verify your broker's disciplinary history by checking the Central Registration Depository (CRD). Either your state securities regulator or FINRA can provide you with CRD information. Your state securities regulator may give you more information from the CRD than FINRA, especially when it comes to investor complaints, so you may want to check with them first. You'll find contact information for your state securities regulator on the website of the North American Securities Administrators Association at www.nasaa.org. To contact FINRA, visit FINRA's BrokerCheck website at www.finra.org, or call them toll-free at (800) 289-9999.

Questions About The People Who Sell Investments

- Are you registered with our state securities regulator? Have you ever been disciplined by the SEC, a state regulator, or other organization (such as FINRA) or one of the stock exchanges)?
- How long has your firm been in business? How many arbitration awards have been filed against your firm?
- What training and experience do you have? How long have you been in the business? What other firms have you been registered with? What is the status of those firms today?
- Have you personally been involved in any arbitration cases? What happened?
- What is your investment philosophy?
- Describe your typical client. Can you provide me with some names and telephone numbers of your long term clients?

- How do you get paid? By commission? By the amount of assets you manage? By another method?
- Do I have any choices on how to pay you? Should I pay you by the transaction? Or a flat fee regardless of how many transactions I have?
- Do you make more if I buy this stock (or bond, or mutual fund) rather than another? If you weren't making extra money, would your recommendation be the same?
- Are you participating in a sales contest? Is this purchase really in my best interest, or are you trying to win a prize?
- You've told me what it costs me to buy this stock (or bond, or mutual fund); how much will I receive if I sell it today?
- Where do you send my order to be executed? Can we get a better price if we send it to another market?
- If your broker changes firms, ask: Did they pay you to change firms? Do you get anything for bringing me along?

Questions About the Progress of Your Investments

- How frequently do I get statements? Do I understand what the statement tells me?
- Is the return on my investment meeting my expectations and goals? Is this investment performing as I was led to believe?
- How much money will I get back if I sell my investment today?
- How much am I paying in commission or fees?
- Have my goals changed? If so, are my investments still suitable?
- What criteria will I use to decide when to sell?

Investor Tip

When you ask these questions, write down the answers you receive and what you decided to do. If something goes wrong, your notes can help to establish what was said. Let your financial professional know you're taking notes. They'll know you're a serious investor and may tell you more.

How to Handle Problems

Act promptly! By law, you only have a limited time to take legal action. Follow these steps to solve your problem:

1. Talk to your financial professional and explain the problem. Where is the fault? Were communications clear? Refer to your notes. What did the financial professional tell you? What do your notes say?
2. If your financial professional can't resolve your problem, then talk to the financial professional's supervisor (which, for brokers, is often the firm's branch manager).
3. If the problem is still not resolved, write to the compliance department at the firm's main office. Explain your problem clearly, and how you want it resolved. Ask the compliance office to respond to you within 30 days. If you're still not satisfied:



4. Send a copy of your letter to your states securities administrator or to the Office of Investor Education and Advocacy at the SEC.

At the SEC, we will research your complaint, contact the firm or person you have complained about and ask them to respond to your specific complaint or question. Sometimes our intervention yields a satisfactory result. If these steps don't work, you may need to take legal action on your own. We can send you information on mediation and arbitration, and suggest how to locate a lawyer if you need one.

Notes

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How to Contact the SEC with Questions or Complaints

Contact the SEC's Office of Investor Education and Advocacy for help. If you have access to the Internet, you can send us your complaint by using our online complaint form at **www.sec.gov/complaint.shtml**. Or you can reach us as follows:



SEC

OFFICE of INVESTOR
EDUCATION and ADVOCACY

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