TEXAS ASSESSMENT
OF CRITICAL THINKING SKILLS™

MC - MR
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INSTRUCTIONS

This is a timed test, so please make certain you understand these directions before you begin. Please do not mark your Scantron for the two example questions.

There are two types of questions that you will encounter in completing the Texas Assessment of Critical Thinking Skills™ (TACTS 2005™). One type is the familiar multiple-choice question where you are to select the best option of those given and mark it on the response sheet. The other type of question consists of **multiple rating questions**. They are similar to multiple-choice questions, but with a difference that may remind you of matching questions.

In doing the multiple rating questions, you will be given a passage to read and a list of labels that express possible evaluations or categories. This list will be followed by a set of numbered items. You are to go over the material in the reading passage, and then, for each numbered item, you are to select the label from the list that **best fits** it.

IMPORTANT NOTE ABOUT THE LABELS: **some of the labels in the list may not be used at all and some of them may be used more than once.** Using a process of elimination to decide if a particular label applies is, therefore, not a good strategy.

Here is an extended example to show how this works:
READING PASSAGE: The Chief's Report
At the November city council meeting, the chief of police of Smithville reported a 50% reduction in the number of burglaries committed in the warehouse district of the town over the previous year. He said this was clearly due to the fact that he had doubled the number of patrols on foot and by car since the previous November.

LABELS for statements expressing criticisms of the chief's report

   (a)   **Strongly relevant, must be checked**
   (b)   **Moderately relevant, should be checked**
   (c)   **Weakly relevant, may or may not be checked**
   (d)   **Irrelevant**

Here is a practice item to be evaluated. Please read it and then go back to the list of evaluative labels and decide how you would label it. Put the letter for the appropriate label on the line next to the number of the statement. After you do that, then read on.

STATEMENTS EXPRESSING CRITICISMS OF THE CHIEF'S REPORT
Example 1. Mayor Cynthia Johnson claimed that the increased patrols were breaking the city's budget because of excessive overtime pay needed.

Example 1. ___

Given the labels in the list, the one that fits the statement best is

Example 1. _(d)_ for "Irrelevant." Even if the Mayor is correct that the costs are prohibitive, her criticism is not relevant to the chief's assertion that the increased patrols **caused** the decline in burglaries.

Try again with this statement, and then turn the page for discussion of the recommended answer:

Example 2. Councilman Stevens said that actually the number of patrols on foot had only increased by 20%, not doubled as the chief claimed.

Example 2. _____

INSTRUCTIONS CONTINUED
Given the labels on the list, the one that fits the statement best is

Example 2. _(b)_ for "Moderately relevant" since the chief is claiming that it was the increase in patrols that caused the decline. If the increase was not as large as he claimed, then that makes his explanation less credible

The reading passage and labels are repeated here, so that you do not have to look back.

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STATEMENTS EXPRESSING CRITICISMS OF THE CHIEF'S REPORT

Example 3. Councilman Rogers questioned the chief's report by asserting that the largest of the four warehouses had closed because of financial difficulties. That meant there was one less warehouse for burglars to steal from, so naturally the number of burglaries was down.

Example 3. _____

Example 4. Councilman Ramirez said that he doubted that officers driving by in patrol cars could see anything.

Example 4. _____

Suggested responses with explanations:

Example 3. ___(a)___   Strongly relevant—if the warehouse that closed down had suffered 50% of the burglaries the previous year, that would explain the decline all by itself

Example 4. ___(c)___   Weakly relevant since it is based on Councilman Ramirez's speculation and nothing more

REMEMBER THE IMPORTANT NOTE ABOUT THE LABELS: some of the labels in the list may not be used at all and some of them may be used more than once. All of the labels were used in this example, but it will not always be so.

Please give the questions that follow on the next few pages, both the multiple choices and multiple ratings, your best effort at thinking carefully and critically. Thank you.

Multiple Choice Questions

SELECT THE BEST ANSWER AND WRITE ANY CALCULATIONS ON THE TEST ITSELF.

1. Suppose a certain product sells for $336. The gross profit is computed as 40% of the cost. Assume that the selling price is equal to the gross profit plus the cost. What is the cost?
    (a) $96.00
    (b) $240.00
    (c) $134.40
    (d) $840.00
    (e)   Cannot be determined

2. George is waiting for two of his customers, Fuzzy Logic Computers, Inc. and Stalking Horse Designs, to pay their bills. If either of them pays before the end of the month, then George can pay his supplier. But if neither of them pays, then George will have to take out a bank loan. George estimates that the chance that Fuzzy Logic will pay in time is 70% and the chance Stalking Horse Designs will pay in time is 60%. Assuming that his estimates are correct and that the two events are independent, what is the chance that George will have to take out a bank loan?
    (a)   12%
    (b)   40%
    (c)   65%
    (d)   42%
    (e)   88%

3. Suppose your parents give you $10,000 for graduation to invest. You decide to invest part of the money in Investment A at 3% interest and the remainder in Investment B earning 8% interest. Suppose that at the end of the first year, you have earned $600 in interest from the investments. Find the amount invested at each rate.
    (a) $5000 in both Investment A and Investment B
    (b) $4000 in Investment A and $6000 in Investment B
    (c) $6000 in Investment A and $4000 in Investment B
    (d) $10 in Investment A and $9990 in Investment B
    (e)   Cannot be determined

4. Suppose the total cost of three hours of Business Law tutoring and two hours of Business Math tutoring is $54.00. The total cost of two hours of Business Law tutoring and one hour of Business Math tutoring is $32.00. What is the cost per hour of tutoring in each subject?
    (a) $12.00 for Business Law and $10.00 for Business Math
    (b) $10.00 for Business Law and $12.00 for Business Math
    (c) $11.00 for Business Law and $11.00 for Business Math
    (d) $19.00 for Business Law and $3.00 for Business Math
    (e)   Cannot be determined

5. Consider the argument: "V Cell Corporation has a lower return on investment than the Punxatawny Group, and Maritime Ltd. has a lower return than V Cell, while Tiresias Inc.'s return is lower than Maritime's. So Maritime's return is less than that of Abas Mining." Which additional information, if added to premises, would make the conclusion necessarily true, if we assume that all of the other information given is true?
    (a)   V Cell has a higher return on investment than Maritime Ltd.
    (b)   Punxatawny Group's return is higher than Abas Mining's return.
    (c)   Abas Mining's return on investment is higher than that of V Cell.
    (d)   Maritime's return is higher than that of Tiresias Inc.
    (e)   None of the above

6.　"Sam, you are not going to be able to finish the audit on time. You'd be able to finish on time only if you had two more CPA's to help you, and you are not going to get them." If we assume that all of the supporting statements are true, the conclusion
(a)　Could not be false
(b)　Is probably true, but may be false
(c)　Is probably false, but may be true
(d)　Could not be true
(e)　None of the above

7.　"All corporations have a board of directors" expresses the same idea as
(a)　Some corporations have a board of directors.
(b)　Some corporations do not have a board of directors.
(c)　No business without a board of directors is a corporation.
(d)　No non-corporation has a board of directors.
(e)　None of the above

8.　Assume that, whenever a grain elevator explodes, there has to be a large amount of grain in the elevator and the grain must be dry. If that assumption is true, then what also <u>must </u>be true?
(a)　If there is a small amount of grain in the elevator, then there will not be an explosion.
(b)　If there is a large amount of dry grain in the elevator, then there will be an explosion.
(c)　If there is no explosion, then there was not a large amount of dry grain in the elevator.
(d)　All of the above.
(e)　None of the above

9.　A recent survey of high school seniors indicated that approximately 50% have at least experimented with cigarette smoking. In the same survey, the researchers found that 90% of high school seniors had seen a movie in which the main character was a smoker and that at least half of those students identified the actors as role models. If this information is correct, what is the best supported characterization of the relationship between movie stars smoking and teenagers experimenting with cigarettes?
(a)　Witnessing smoking in movies leads teenagers to experiment with smoking.
(b)　Teenage cigarette smoking is correlated with cigarette smoking in movies.
(c)　Witnessing an actor smoking in real life causes teenagers to experiment with cigarettes.
(d)　Seeing stars smoking in movies does not lead teenagers to experiment with smoking.
(e)　There is not enough information to support any of the characterizations given above.

10.　Julie is beginning work on her undergraduate honors thesis. She has developed the following hypothesis: "Men are more likely to cheat in romantic relationships than women." Now Julie should do which of the following:
(a)　Gather information that supports her hypothesis. If she can find enough information that agrees with her hypothesis then it must be correct.
(b)　Gather information that may contradict her hypothesis. If she finds contradictory information, her hypothesis may have to be reworked, but, if she doesn't find any, her hypothesis is more likely to be correct.
(c)　There is no way to test this hypothesis since it involves human beings.
(d)　There is no need to test this hypothesis since it is common knowledge that men cheat more than women.
(e)　Spend more time gathering opinions on the topic from discussions on the Internet.

11.	(Radio Announcer:) "There has been an incredible surge in America's interest in the Japanese rice wine called "sake." In the past four years, sales of sake in the USA have doubled; while in California sake sales are up 70 percent. I'm here in Berkeley, California's largest wine store—Chez Chuck—where manager Joe Adams tells me they now sell 320 bottles a month—up from only 200 four years ago."

Which of these lists shows the correct order of sales increases starting from <u>lowest</u> rate of increase <u>on the left</u> to the <u>highest</u> increase <u>on the right</u>?
(a)	USA, California, Chez Chuck
(b)	Chez Chuck, USA, California
(c)	California, USA, Chez Chuck
(d)	California, Chez Chuck, USA
(e)	Chez Chuck, California, USA

12.	Suppose a company is testing the effectiveness of a new ad campaign. The company surveyed 100 consumers in a mall and 50 were shown the ad while the other 50 were not. The consumers were then asked to indicate whether or not they would purchase the product. The results are tabled below.

Buy Product	No Ad	Ad Viewed
NO	18	12
YES	32	38

If one of the consumers is randomly selected, what is the probability he/she would not buy the product if they did not see the ad?
(a) 18/100
(b) 18/50
(c) 18/30
(d) 18/32
(e) Not enough information to be able to tell

13.	If we <u>assume</u> that both "All corporations are legal creations" and "No persons are corporations" are true, then what can we say about this statement: (1) "No person is a legal creation"?
(a) Statement (1) must be true if the assumptions are true.
(b) Statement (1) is probably true if the assumptions are true.
(c) Statement (1) is false if the assumptions are true.
(d) Statement (1) cannot be determined to be true or false on the basis of the assumptions
(e) None of the above

14.	Consider the following situation: nine employees from three separate divisions are going to car-pool to a nearby conference and must travel in two vehicles. Here are the employees and their divisions:
•	Bob, Joe and Stan are from Engineering,
•	Frank and Cindy are from Marketing, and
•	Kyle, Randy, Ann, and Edward are from Design.

The problem is that the employees do not all get along. In particular, individuals from Engineering will not ride with individuals from Marketing, so to accommodate this fact what is a <u>possible</u> combination for car #1 which can only seat <u>four</u> persons?

(a) Bob, Joe, Stan, and Frank
(b) Kyle, Randy, Ann and Edward.
(c) Frank, Cindy, Randy and Edward.
(d) Joe, Stan, Cindy and Kyle.
(e) Stan, Joe, Frank and Edward.

Multiple Rating Questions

SELECT THE BEST LABEL FOR EACH ITEM:

You will be given information to read, and then a list of several labels that express either evaluations or categorizations. You are then going to be presented with a set of numbered test items, and for each item select a label from the list that best applies to it and then place the letter for that label in the space beside the number of the item.

QUESTIONS 15-19
The governor of New Falkland proudly pointed to the success of a "get tough on drunk drivers" law he had gotten passed and that took effect during 1961. The law allowed police to confiscate driver's licenses from people who failed the breathalyzer test. At his press conference the governor made a number of statements, and you are to indicate how well supported each statement is by referring to the information in the chart below.

Number of Deaths Involving Drinking and Driving
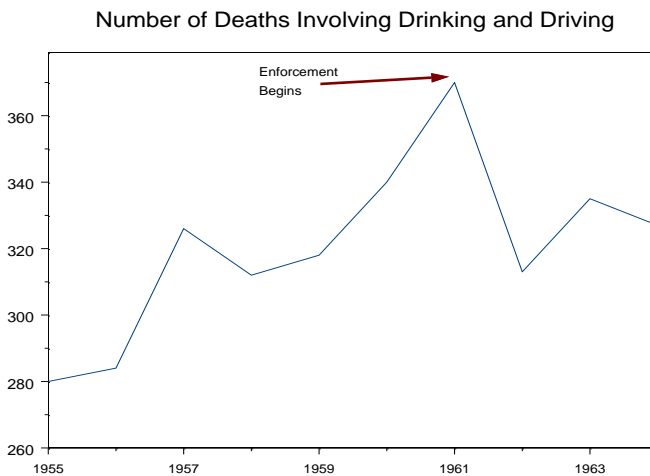
LABELS FOR EACH OF THE STATEMENTS IN 15-19:

(a) The information in the chart strongly supports the statement.
(b) The information in the chart weakly supports the statement.
(c) The information in the chart neither supports nor contradicts the statement.
(d) The information in the chart weakly contradicts the statement.
(e) The information in the chart strongly contradicts the statement

_____15. "My opponents are wrong when they say that the law didn't work."

_____16. "The data show that there was nearly a 50% drop in deaths involving drunk drivers."

_____17. "The law clearly caused a drop in the share of all automobile deaths due to drunk drivers."

_____18. "The law has saved the lives of more than 80 people in the first year alone."

_____19. "The data are consistent with the conclusion that the license confiscation law has worked the way we wanted it to."

READING PASSAGE THAT CONTAINS AN ARGUMENT RELATED TO ITEMS 20-23:

The Hadley Advertising Agency produces really effective advertising. We know this because their biggest client, Humongo Automobiles, has raised their advertising budget with Hadley in each of the past five years, and Humongo sales have also increased for each of the past five years.

LABELS FOR THE STATEMENTS PRESENTED IN 20-23:
- (a)   Strongly positively relevant, must be considered a strong support for the reading passage
- (b)   Weakly positively relevant, gives some degree of support, but not very conclusive
- (c)   Irrelevant
- (d)   Weakly negatively relevant, tends to contradict the passage, but not very conclusive
- (e)   Strongly negatively relevant, must be considered a strong negation of the passage

STATEMENTS TO BE EVALUATED:

_____20. Public opinion surveys that show that most consumers claim they do not buy products because of advertising.

_____21. The argument goes from correlational evidence to a conclusion about cause and effect without considering other possible explanations for the correlation.

_____22. The argument ignores data from many other Hadley clients that show no appreciable increase in sales.

_____23. All other Hadley clients' marketing directors support the idea that Hadley advertising boosted their company's sales.

READING PASSAGE RELATED TO ITEMS 24-27:

An argument about capital punishment: We need to put an end to the practice of capital punishment. At first glance it becomes obvious that it is a form of cruel and unusual punishment. Why else has the majority of the free world abolished it already? It is also clear that it provides no deterrent effect. Just ask individuals on death row. They will tell you the death penalty wasn't even a thought to them until after they were arrested. How can something deter when it is so sparingly used and so arbitrarily applied? We are clinging to an archaic system of revenge that needs to be abolished.

LABELS FOR STATEMENTS 24-27 IN RELATION TO THE ARGUMENT
- (a)   The statement is an initial premise, a statement that supports the rest of the argument but is not itself supported by anything in the argument
- (b)   The statement is an intermediate conclusion, a statement for which reason(s) are given and which is then used as a premise for a further inference to another conclusion
- (c)   The statement is the final conclusion of the argument
- (d)   This statement is not stated precisely as such in the passage, but it is clearly assumed as part of the argument
- (e)   This statement is additional information that is not part of the argument itself

STATEMENTS TO BE LABELED

_____24. It is also clear that it provides no deterrent effect.

_____25. We need to put an end to the practice of capital punishment.

_____26. At first glance it becomes obvious that it is a form of cruel and unusual punishment.

_____27. If a punishment is sparingly used and arbitrarily applied, then it has no deterrent effect.

READING PASSAGE RELATED TO ITEMS 28-31

It is well known that teenagers are antisocial and pose problems for the society in which they live. These difficulties are universally experienced by all human societies throughout recorded history.

LABELS FOR STATEMENTS EXPRESSING POSSIBLE EVIDENCE FOR OR AGAINST THE ASSERTIONS IN THE READING PASSAGE. THE EVIDENCE STATEMENTS ARE ITEMS 28-31:

> (a) Strongly positively relevant, must be considered a strong support for the reading passage
>
> (b) Weakly positively relevant, gives some degree of support, but not very conclusive
>
> (c) Irrelevant
>
> (d) Weakly negatively relevant, tends to contradict the passage, but not very conclusive
>
> (e) Strongly negatively relevant, must be considered a strong negation of the passage

STATEMENTS OF POSSIBLE EVIDENCE FOR OR AGAINST THE READING PASSAGE:

_____28. Anthropologist Margaret Mead in 1923 talked to adults in a primitive society on the island of Samoa, and she was told that their teenagers were consistently courteous to their elders, helped out with chores, and behaved pleasantly in their dealings with each other.

_____29. An Australian journalist in 1990 talked to the village elders on Samoa and was told that the adults had lied to Margaret Mead, and had actually sent their teenage problems to a remote part of the island for as long as Dr. Mead was present.

_____30. Teenage elephants have been known to rampage and even kill smaller elephants in their groups. Larger bull elephants are brought in to physically "back down" the violent teenagers, and they eventually learn to fit into the herd.

_____31. Translations of folk tales from 120 different languages have been studied with the conclusion that 95% of the violent homicides in them were carried out by teenage males.

READING PASSAGE RELATED TO ITEMS 32-36

Any CPA firm that fears the loss of a major client and that, therefore, fails to report the use of a questionable accounting practice by that client, has violated the principle of independence. When a CPA firm violates the principle of independence, it exposes itself to liability for losses incurred because investors were misled by the client's questionable accounting practices. The southwestern office of the CPA firm of USA Accounting LLP knowingly did not report a questionable accounting practice by its major client Webb Energy Inc.

LABELS—YOU ARE TO ASSUME THAT ALL OF THE INFORMATION IN THE PASSAGE IS CORRECT, AND THEN USE THESE LABELS TO ASSESS THE IMPACT OF THAT INFORMATION ON THE STATEMENTS LISTED IN 32-36:

(a) Given the information in the passage, the statement is conclusively true.

(b) Given the information in the passage, the statement is probably true.

(c) The information is relevant to the particular statement, but it is not enough to make it probably true.

(d) The information in the passage is not relevant to the truth or falsity of the statement.

(e) Given the information in the passage, the statement is false.

STATEMENTS TO EVALUATE:

_____32. USA Accounting LLP will be held accountable if Webb Energy Inc.'s investors suffer losses.

_____33. The southwestern office of USA Accounting intentionally misled investors.

_____34. Webb Energy Inc. and USA Accounting had been in a long-term relationship that started in the 1980s.

_____35. The southwestern office of USA Accounting violated the principle of independence