

Cornell Critical Thinking Test Series

THE CORNELL CONDITIONAL-REASONING TEST, FORM X

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Fill in the blanks when you are asked to do so:

Print your last name only _____

Print your first and middle names _____

Your age on your last birthday _____ years

Your date of birth: month _____ day _____ year _____

Your grade _____

Your school _____

Your regular teacher at this time _____

Today's date: month _____ day _____ year _____

General directions:

This is a test to see how well you do a particular kind of thinking. We call it "conditional reasoning". You will see that you already do some of this kind of thinking. The sample questions make clear what is expected.

DO NOT GUESS WILDLY. There is a scoring penalty for guessing wrong. If you think you have the answer, but are not sure, mark that answer. But if you have no idea, then skip the question.

There are 6 sample questions, then 72 others. You should work as quickly as you can, but do not rush. This is not a speed test. Once you do the samples, you will be able to move right along.

DO NOT TURN THE PAGE UNTIL YOUR EXAMINER TELLS YOU TO DO SO.

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Published by Illinois Critical Thinking Project, Department of Educational Policy Studies, University of Illinois at Urbana-Champaign.

Answering the questions:

In answering each question, use only what you are told in that question. In order to do this, you should imagine that your mind is blank, because some of the things you are told are obviously false. Even so, you should suppose that they are true--for that question only.

You will be given one or more sentences with which to think. You will then be given another sentence, about which you must decide, using only what you were told.

There are three possible answers. This is what they mean:

- A. YES It must be true.
- B. NO It can't be true.
- C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

The meaning of the possible answers is given at the top of each page to help you remember. Each question has only one correct answer.

Mark your answers on this booklet by drawing a circle around the right answer. Remember: If you have no idea what the answer is, skip the question and go on to the next. Do not guess wildly, but if you think you know, then answer the question.

Sample questions:

Read the first question and see how it is marked.

1. Suppose you know that

Bill is next to Sam.

Then would this be true?

Sam is next to Bill.

1. A. YES

B. NO

C. MAYBE

The correct answer is A, "YES". If Bill is next to Sam, then Sam must be next to Bill. It must be true, so a circle is drawn around "YES".

Here is another sample. This time you circle the answer.

2. Suppose you know that

The sparrow is over the hawk.

Then would this be true?

The hawk is over the sparrow.

2. A. YES

B. NO

C. MAYBE

You should have circled B. "NO". If the sparrow is over the hawk, then the hawk can't be over the sparrow. It can't be true.

Here is a reminder of the meaning of the possible answers:

- | | |
|----------|---|
| A. YES | It must be true. |
| B. NO | It can't be true. |
| C. MAYBE | It may be true or it may not be true. You weren't told enough to be <u>certain</u> whether it is "YES" or "NO". |

Circle the answer to this next sample. Be careful:

3. Suppose you know that

Jane is standing near Betsy.

Then would this be true?

Betsy is standing near Jane.

3. A. YES

B. NO

C. MAYBE

The correct answer is C, "MAYBE". Even if Jane is standing near Betsy, Betsy may be sitting. Betsy might be standing near Jane, but she might be sitting near Jane, or something else. You were not told enough to be certain about it, so "MAYBE" is the answer.

Circle the answer to this next sample question. Remember that your mind is supposed to be blank at the beginning of each question.

4. Suppose you know that

California is near
New York.

Then would this be true?

New York is near
California.

4. A. YES

B. NO

C. MAYBE

The correct answer is A, "YES", even though New York and California are not really near to each other. If California were near to New York, then New York would be near to California. It would have to be true.

Remember: You should suppose that what you are told is true--for the question you are answering.

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

So far in the sample questions you were told only one thing. In this one you are told two things. Circle your answer.

5. Suppose you know that

The pit is inside of the mouth of the fox.

The cherry is inside the mouth of the fox.

Then would this be true?

The pit is inside the cherry.

5. A. YES
 B. NO
 C. MAYBE

The correct answer is C, "MAYBE". All you are told is that the pit and the cherry are both in the mouth of the fox. There is no way to be certain whether the pit is in the cherry or not.

Here is the last sample question. This time the letters "X" and "Y" are used. They can stand for anything you like. Circle your answer.

6. Suppose you know that

X is next to Y.

Then would this be true?

Y is next to X.

6. A. YES
 B. NO
 C. MAYBE

The correct answer is A, "YES", no matter what X and Y stand for. If X is next to Y, then Y must be next to X.

Now that you have done the practice questions you probably understand what is expected. If you have any questions, ask them now.

DO NOT TURN THE PAGE UNTIL YOU ARE TOLD TO DO SO.

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

7. Suppose you know that

If the hat on the table is blue, then it belongs to Joan.
 The hat on the table is blue.

Then would this be true?

The hat on the table belongs to Joan

7. A. YES
 B. NO
 C. MAYBE

8. Suppose you know that

If the car in the parking lot is Mr. Smith's, then it is blue.
 The car in the parking lot is not blue.

Then would this be true?

The car in the parking lot is Mr. Smith's.

8. A. YES
 B. NO
 C. MAYBE

9. Suppose you know that

If Tom lives in the white house, then his last name is Smith.
 Tom does not live in the white house.

Then would this be true?

Tom's last name is not Smith.

9. A. YES
 B. NO
 C. MAYBE

10. Suppose you know that

Harry is on the football team only if he has his mother's permission.
 Harry is on the football team.

Then would this be true?

Harry has his mother's permission.

10. A. YES
 B. NO
 C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

11. Suppose you know that

If Mary lives in the white house, then
 her last name is Brown.
 Mary's last name is Brown.

Then would this be true?

Mary lives in the white house.

11. A. YES

B. NO

C. MAYBE

12. Suppose you know that

John is in the kitchen only if there is
 food in the kitchen.
 There is no food in the kitchen.

Then would this be true?

John is in the kitchen.

12. A. YES

B. NO

C. MAYBE

13. Suppose you know that

If the automobile in the parking lot
 belongs to Mr. Brown, then it is
 black.
 The automobile in the parking lot
 doesn't belong to Mr. Brown.

Then would this be true?

The automobile isn't black.

13. A. YES

B. NO

C. MAYBE

14. Suppose you know that

Joe's bicycle is not working today.
 If Joe's bicycle is not working, then he
 has to walk to school.

Then would this be true?

Joe has to walk to school today?

14. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

<p>15. Suppose you know that</p> <p style="padding-left: 40px;">There is an X only if there is a Y. There is not a Y.</p> <p>Then would this be true?</p> <p style="padding-left: 40px;">There is an X.</p>	<p>15. A. YES</p> <p>B. NO</p> <p>C. MAYBE</p>
<p>16. Suppose you know that</p> <p style="padding-left: 40px;">Dick was not at home yesterday afternoon. If Dick was not at the football game yesterday afternoon he was at home.</p> <p>Then would this be true?</p> <p style="padding-left: 40px;">Dick was not at the football game yesterday afternoon.</p>	<p>16. A. YES</p> <p>B. NO</p> <p>C. MAYBE</p>
<p>17. Suppose you know that</p> <p style="padding-left: 40px;">Tom may use paints only if he has cleaned up his clay work. Tom may use paints.</p> <p>Then would this be true?</p> <p style="padding-left: 40px;">Tom has cleaned up his clay work.</p>	<p>17. A. YES</p> <p>B. NO</p> <p>C. MAYBE</p>
<p>18. Suppose you know that</p> <p style="padding-left: 40px;">Fred went to a movie last night. If Fred does not go to a movie, he feels bad the next day.</p> <p>Then would this be true?</p> <p style="padding-left: 40px;">Fred does not feel bad today.</p>	<p>18. A. YES</p> <p>B. NO</p> <p>C. MAYBE</p>

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

19. Suppose you know that

If there is an X, then there is a Y.
 There is an X.

Then would this be true?

There is a Y.

19. A. YES

B. NO

C. MAYBE

20. Suppose you know that

Mary will be in the school play only if
 she likes plays.
 Mary will be in the school play.

Then would this be true?

Mary does not like plays.

20. A. YES

B. NO

C. MAYBE

21. Suppose you know that

Tom is playing ball only if he has a ball
 glove.
 Tom does not have a ball glove.

Then would this be true?

Tom is playing ball.

21. A. YES

B. NO

C. MAYBE

22. Suppose you know that

If there is an X, then there is a Y.
 There is not a Y .

Then would this be true?

There is an X.

22. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

23. Suppose you know that

If whales are birds, then they can fly.
 Whales aren't birds.

Then would this be true?

Whales can't fly.

23. A. YES

B. NO

C. MAYBE

24. Suppose you know that

If Bill lives on a farm, then he has a pet dog.
 Bill has a pet dog.

Then would this be true?

Bill lives on a farm.

24. A. YES

B. NO

C. MAYBE

25. Suppose you know that

Jerry was not asked to play ball.
 Jerry is not home only if he was asked to play ball.

Then would this be true?

Jerry is not home.

25. A. YES

B. NO

C. MAYBE

26. Suppose you know that

If Mary lives in the green house, then her last name is Jones.
 Mary doesn't live in the green house.

Then would this be true?

Mary's last name is not Jones.

26. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

27. Suppose you know that

If the coat in the closet is brown, then it belongs to Sue.
 The coat in the closet is brown.

Then would this be true?

The coat in the closet does not belong to Sue.

27. A. YES

B. NO

C. MAYBE

28. Suppose you know that

There are black cats only if there are pink cats.
 There are black cats.

Then would this be true?

There are pink cats.

28. A. YES

B. NO

C. MAYBE

29. Suppose you know that

If the bicycle in the garage is Bob's, then it is red.
 The bicycle in the garage is not red.

Then would this be true?

The bicycle in the garage is not Bob's.

29. A. YES

B. NO

C. MAYBE

30. Suppose you know that

If there is an X, then there is a Y.
 There is a Y.

Then would this be true?

There is an X.

30. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

31. Suppose you know that

If mice have five legs, then they run faster than horses.
 Mice do have five legs.

Then would this be true?

Mice run faster than horses.

31. A. YES

B. NO

C. MAYBE

32. Suppose you know that

If Jane fell off her horse, then she hurt herself badly.
 Jane hurt herself badly.

Then would this be true?

Jane fell off her horse.

32. A. YES

B. NO

C. MAYBE

33. Suppose you know that

The short pencil is not Bill's favorite pencil.
 The short pencil is not Bill's favorite, only if it is dull.

Then would this be true?

The short pencil is dull.

33. A. YES

B. NO

C. MAYBE

34. Suppose you know that

If there is an X, then there is a Y.
 There is not an X.

Then would this be true?

There is not a Y.

34. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

35. Suppose you know that

If John lives in the white house, then his last name is Smith.
 John's last name is not Smith.

Then would this be true?

John does live in the white house.

35. A. YES

B. NO

C. MAYBE

36. Suppose you know that

Birds can fly only if they can play the piano.
 Birds cannot play the piano.

Then would this be true?

Birds can fly.

36. A. YES

B. NO

C. MAYBE

37. Suppose you know that

The car will start.
 If the temperature is not below freezing, the car will start.

Then would this be true?

The temperature is not below freezing.

37. A. YES

B. NO

C. MAYBE

38. Suppose you know that

There is an X only if there is a Y.
 There is an X.

Then would this be true?

There is a Y.

38. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

39. Suppose you know that

If dogs have four legs, then they have three eyes.
 Dogs don't have three eyes.

Then would this be true?

Dogs do have four legs.

39. A. YES

B. NO

C. MAYBE

40. Suppose you know that

If Jean goes to the park, she will see her friend Pat.
 Today, Jean is going to the park.

Then would this be true?

Today, Jean will see her friend Pat.

40. A. YES

B. NO

C. MAYBE

41. Suppose you know that

If horses are green, then they have two tails.
 Horses have two tails.

Then would this be true?

Horses are green.

41. A. YES

B. NO

C. MAYBE

42. Suppose you know that

The red pencils belong to Sally only if they are on the table.
 The red pencils are not on the table.

Then would this be true?

The red pencils do not belong to Sally.

42. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

43. Suppose you know that

If Paul rides his bike to school, he goes the long way.
 Paul rode his bike to school today.
 If Paul goes the long way, he gets to school late.

Then would this be true?

Paul was not late for school today.

43. A. YES

B. NO

C. MAYBE

44. Suppose you know that

If the chair is green, then the table is black.

Then would this be true?

If the table is black, then the chair is green.

44. A. YES

B. NO

C. MAYBE

45. Suppose you know that

If there is a blue pencil in the second box, then there is a green pencil in the first box.

If there is a green pencil in the first box, then there is a red pencil in the third box.

Then would this be true?

If there is a blue pencil in the second box, then there is a red pencil in the third box.

45. A. YES

B. NO

C. MAYBE

46. Suppose you know that

If Mrs. Smith entered the flower show, then she entered her roses.

Then would this be true?

If Mrs. Smith didn't enter her roses, then

46. A. YES

B. NO

C. MAYBE

she didn't enter the flower show.

--

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

47. Suppose you know that

Bill will see Audrey, if and only if he goes to Montreal.
 Bill will not see Audrey this year.

Then would this be true?

Bill is going to Montreal this year.

47. A. YES

B. NO

C. MAYBE

48. Suppose you know that

If Gary sees Sharon, he goes to Canada.
 This winter Gary saw Sharon.
 Gary goes skating only if he goes to Canada.

Then would this be true?

This winter Gary went skating.

48. A. YES

B. NO

C. MAYBE

49. Suppose you know that

If there is an A, then there is a B.
 If there is a B, then there is a C.

Then would this be true?

If there is an A, then there is a C.

49. A. YES

B. NO

C. MAYBE

50. Suppose you know that

If birds can fly, then they have six legs.

Then would this be true?

If birds don't have six legs, then they can't fly.

50. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

51. Suppose you know that

If the bus goes to town, then it passes
 the old stone church.
 The bus goes to town.
 If it passes the old stone church, then it
 goes over the new bridge.

Then would this be true?

The bus doesn't go over the new bridge.

51. A. YES
 B. NO
 C. MAYBE

52. Suppose you know that

If the school team loses this game,
 Brighton High will win the league
 pennant.
 If Joe does not hit a homer on this pitch,
 the school team will lose this game.

Then would this be true?

If Joe does not hit a homer on this pitch,
 Brighton High will win the league
 pennant.

52. A. YES
 B. NO
 C. MAYBE

53. Suppose you know that

If Jean goes shopping, she goes to
 Chicago.
 Last Saturday Jean went shopping.
 Jean visits her aunt only if she goes to
 Chicago.

Then would this be true?

Last Saturday Jean visited her aunt.

53. A. YES
 B. NO
 C. MAYBE

54. Suppose you know that

Tom will go skating, if and only if he
 can borrow Frank's jacket.
 Tom is not going skating.

Then would this be true?

54. A. YES
 B. NO
 C. MAYBE

Tom can borrow Frank's jacket.

--

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

55. Suppose you know that

If Sam misses the bus, he will walk to school.
 If Sam walks to school, he will cross the bridge.

Then would this be true?

If Sam misses the bus, he will cross the bridge.

55. A. YES

B. NO

C. MAYBE

56. Suppose you know that

If Bob did not buy a new baseball glove, then he played basketball today.

Then would this be true?

If Bob did not play basketball today, then he did buy a new baseball glove.

56. A. YES

B. NO

C. MAYBE

57. Suppose you know that

If Bill has an apple in his lunchbox, then Sally has a cracker in her lunchbox.

Then would this be true?

If Sally has a cracker in her lunchbox, then Bill has an apple in his lunchbox.

57. A. YES

B. NO

C. MAYBE

58. Suppose you know that

Betty is going to the movies.
 Betty is not going to the movies, if and only if Ann is going to the movies.

Then would this be true?

Ann is going to the movies.

58. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

59. Suppose you know that

If there is an X, then there is a Y.

Then would this be true?

If there is a Y, then there is an X.

59. A. YES

B. NO

C. MAYBE

60. Suppose you know that

Elephants are pink, if and only if they are large .

Elephants are not pink.

Then would this be true?

Elephants are large.

60. A. YES

B. NO

C. MAYBE

61. Suppose you know that

If there is an X, then there is a Y.

Then would this be true?

If there is not a Y, then there is not an X.

61. A. YES

B. NO

C. MAYBE

62. Suppose you know that

If John has the red chalk, then he is making a poster for the play.

John has the red chalk.

If John is making a poster for the play, then he is in the library.

Then would this be true?

John is in the library.

62. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

63. Suppose you know that

That bicycle belongs to John, if and only if it is red.
 That bicycle belongs to John.

Then would this be true?

That bicycle is not red.

63. A. YES

B. NO

C. MAYBE

64. Suppose you know that

If a dog can stand on its front legs, then it is a puppy.

Then would this be true?

If a dog is a puppy, then it can stand on its front legs.

64. A. YES

B. NO

C. MAYBE

65. Suppose you know that

If there is an X, then there is a Y.
 There is an X.
 There is a Z only if there is a Y.

Then would this be true?

There is a Z.

65. A. YES

B. NO

C. MAYBE

66. Suppose you know that

If Kate is in Mrs. Jones' class, then she is out on the playground.
 If Kate is out on the playground, then she is jumping rope.

Then would this be true?

If Kate is in Mrs. Jones' class, then she is jumping rope.

66. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

67. Suppose you know that

If there is an X, then there is a Y.
 There is an X.
 If there is a Y, then there is a Z.

Then would this be true?

There is not a Z.

67. A. YES

B. NO

C. MAYBE

68. Suppose you know that

If Jane did not go to the movies
 yesterday, then she saw her friend
 Pat.
 Jane went to the park yesterday only if
 she saw her friend Pat.
 Jane did not go to the movies yesterday.

Then would this be true?

Jane went to the park yesterday.

68. A. YES

B. NO

C. MAYBE

69. Suppose you know that

If Nancy bought a new dress, then she
 went to the shop on Main Street.

Then would this be true?

If Nancy didn't go to the shop on Main
 Street, then she didn't buy a new
 dress.

69. A. YES

B. NO

C. MAYBE

70. Suppose you know that

If John is not in school, then he has a
 cold.

Then would this be true?

If John has a cold, then he is not in
 school.

70. A. YES

B. NO

C. MAYBE

Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
- B. NO It can't be true.
- C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

71. Suppose you know that

If Sally is writing a report at home, then the library is closed.
 Sally is writing a report at home.
 Dick is using the classroom dictionary only if the library is closed.

Then would this be true?

Dick is using the classroom dictionary.

71. A. YES
 B. NO
 C. MAYBE

72. Suppose you know that

If there are no blue pencils in the first box, then there is a green pencil in the second box.
 If there is a green pencil in the second box, then there is a red pencil in the third box.
 There are no blue pencils in the first box.

Then would this be true?

There are no red pencils in the third box.

72. A. YES
 B. NO
 C. MAYBE

73. Suppose you know that

If an animal is a turtle, then it can fly.
 If an animal can fly, then it has feathers.

Then would this be true?

If an animal is a turtle, then it has feathers.

73. A. YES
 B. NO
 C. MAYBE

74. Suppose you know that

If there is a yellow marble in the first box, then there is a blue marble in the second box.

Then would this be true?

If there is not a blue marble in the second box, then there is not a

74. A. YES
 B. NO
 C. MAYBE

yellow marble in the first box.

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Here is a reminder of the meaning of the possible answers:

- A. YES It must be true.
 B. NO It can't be true.
 C. MAYBE It may be true or it may not be true. You weren't told enough to be certain whether it is "YES" or "NO".

75. Suppose you know that

If people have fins, then they live in water.
 People have fins.
 People can swim only if they live in water.

Then would this be true?

People can swim.

75. A. YES

B. NO

C. MAYBE

76. Suppose you know that

If this animal is a dog, then it can fly.
 This animal is a dog.
 If an animal can fly, then it has feathers.

Then would this be true?

This animal does not have feathers.

76. A. YES

B. NO

C. MAYBE

77. Suppose you know that

If John is on the volleyball team, then he is good at volleyball.

Then would this be true?

If John is good at volleyball, then he is on the volleyball team.

77. A. YES

B. NO

C. MAYBE

78. Suppose you know that

There is a Y, if and only if there is an X.
 There is not a Y.

Then would this be true?

There is an X.

78. A. YES

B. NO

C. MAYBE

END OF TEST. GO BACK AND CHECK YOUR ANSWERS.