

Example Assessment Questions

For Probability Calculations and Game Rules

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Dice Probability Questions

The notation $P(A)$ has which meaning?

- A. The probability P that event A will not occur
- B. The probability P that event A will occur
- C. The probability P that event A will be complemented

ANSWER: B

The notation $1 - P(A)$ has which meaning?

- A. The probability P that event A will not be complemented
- B. The probability P that event A will occur
- C. The probability P that the complement of event A will occur

ANSWER: C

Which is the best definition for probability?

- A. The likelihood that an event will occur
- B. The frequency with which an event has occurred
- C. The odds that an event will occur by pure chance

ANSWER: A

A six-sided die is rolled one time. What is the probability of getting a 4?

- A. $4/6$
- B. $1/6$
- C. $3/6$

ANSWER: B

A six-sided die is rolled one time. What is the probability of getting a 5 or 6?

- A. $2/6$
- B. $3/6$
- C. $1/6$

ANSWER: A

Two six-sided dice are rolled. What is the probability of getting a 3 and a 4?

- A. $2/36$
- B. $7/36$
- C. $1/36$

ANSWER: C

How many permutations of 3 dice can be made from a set of 7?

- A. 210
- B. 21

C. 35

ANSWER: A

How many combinations of 5 dice can be made from a set of 8?

A. 40

B. 6,720

C. 56

ANSWER: C

Three six-sided dice are rolled. What is the probability of getting two sixes?

A. $12/216$

B. $15/216$

C. $18/216$

ANSWER: B

Six six-sided dice are rolled. What is the probability of getting three of a kind?

A. $14,400/46,656$

B. $15,000/46,656$

C. $15,552/46,656$

ANSWER: A

Go Game Rules Questions

In Go, after a piece is placed on the board, it may be removed under which circumstance?

A. It is completely surrounded by pieces of the same color

B. It is completely surrounded by pieces of the opposing color

C. It is completely surrounded by pieces of either color

ANSWER: B

A Go piece is placed on the board. In which circumstance does a suicide occur?

A. The piece would normally cause itself to be captured, but instead captures an opposing piece

B. The piece would cause an opposing piece to be captured

C. The piece would cause itself to be captured

ANSWER: C

In Go, which is an exception to the suicide rule?

A. The piece would cause both itself and an opposing piece to be captured

B. The piece would normally cause an opposing piece to be captured, but instead captures itself

C. The piece would normally cause itself to be captured, but instead captures an opposing piece

ANSWER: C

In Go, under which circumstance is a piece captured?

A. It has no liberties that are unoccupied by pieces of the opposite color

- B. It has no liberties that are unoccupied by pieces of the same color
- C. It has no liberties that are unoccupied by pieces of any color

ANSWER: A

In Go, a solitary game piece can have a maximum of how many liberties?

- A. 8
- B. 2
- C. 4

ANSWER: C

In Go, a group of three pieces can have a maximum of how many liberties?

- A. 9
- B. 8
- C. 6

ANSWER: B

In Go, a straight vertical group of six black stones has liberties covered by three white stones. How many liberties does the group have?

- A. 11
- B. 8
- C. 3

ANSWER: A

Which best describes Go's Ko Rule?

- A. A piece may not be played upon a point that has already been occupied
- B. A piece may not be played in a way that would cause its own capture
- C. A piece may not be played that would immediately recreate a prior state of the game

ANSWER: C

How is a player's score calculated in Go according to the Chinese area method?

- A. Score = unoccupied points within territory + all pieces within territory + opposing pieces captured
- B. Score = unoccupied points within territory - pieces captured by opponent
- C. Score = unoccupied points within territory + opposing pieces within territory + opposing pieces captured

ANSWER: A

Four stones form a group in Go. Which configuration is optimal in terms of liberties?

- A. A horizontal line
- B. A square shape
- C. An L shape

ANSWER: A