MULTIPLE CHOICE

A fair coin is flipped twice. What is the probability of getting two tails?

(1/4)

(1/2)

(3/4)

1

MULTIPLE CHOICE

Two dice are rolled. What is the probability both show a 6?

(1/36)

(1/6)

(1/12)

(1/3)

MULTIPLE CHOICE

A bag has 3 red and 2 blue marbles. Two marbles are drawn with replacement. What is P(both red)?

(9/25)

(1/5)

(3/10)

(6/25)

MULTIPLE CHOICE

The probability of rain on Saturday is 0.3 and on Sunday is 0.4. What is P(no rain both days)?

0.42

0.12

0.70

0.88

MULTIPLE CHOICE

A light bulb has 10% chance of failing in the first year. Two bulbs are installed. What is P(both fail)?

0.01

0.10

0.19

0.20

MULTIPLE CHOICE

A spinner has 1/3 chance of landing on red. If spun twice, what is P(not red both times)?

(4/9)

(1/9)

(2/3)

(5/9)

MULTIPLE CHOICE

Two cards are drawn with replacement from a deck. What is P(both aces)?

(1/169)

(1/13)

(1/26)

(1/52)

MULTIPLE CHOICE

A fair coin is flipped 3 times. What is P(all heads)?

(1/8)

(1/2)

(1/4)

(3/8)

MULTIPLE CHOICE

Machine A has 5% defect rate, Machine B has 3%. One item from each machine. What is P(both defective)?

0.0015

0.08

0.15

0.02

MULTIPLE CHOICE

A die is rolled twice. What is P(first roll > 4 and second roll < 3)?

(1/9)

(1/6)

(1/12)

(1/18)

MULTIPLE CHOICE

A bag has 4 green and 6 yellow balls. Two drawn with replacement. What is P(first green, second yellow)?

(6/25)

(2/15)

(12/45)

(3/10)

MULTIPLE CHOICE

Probability John is late is 0.2, Sarah is 0.1. What is P(neither late)?

0.72

0.02

0.30

0.80

MULTIPLE CHOICE

A coin is flipped and a die is rolled. What is P(heads and even number)?

(1/4)

(1/2)

(1/6)

(1/12)

MULTIPLE CHOICE

Two independent events: P(A) = 0.6, P(B) = 0.5. What is P(A and B)?

0.30

0.11

1.10

0.80

MULTIPLE CHOICE

A fair coin is flipped twice. What is P(first heads, second tails)?

(1/4)

(1/2)

(3/4)

(1/3)

MULTIPLE CHOICE

A test has 10 multiple-choice questions, each with 4 options. If random guesses, what is P(all wrong)?

(0.75)^10

(0.25)^10

1 - (0.25)^10

(0.50)^10

MULTIPLE CHOICE

Two archers: P(Alice hits target) = 0.8, P(Bob hits) = 0.6. What is P(both hit)?

0.48

0.14

1.40

0.96

MULTIPLE CHOICE

A die is rolled three times. What is P(no sixes)?

(125/216)

(1/216)

(25/36)

(5/6)

MULTIPLE CHOICE

P(A) = 0.4, P(B) = 0.7, A and B independent.
What is P(neither occurs)?

0.18

0.28

0.42

0.11

MULTIPLE CHOICE

A coin is flipped and a card drawn from a deck. What is P(tails and heart)?

(1/8)

(1/4)

(1/2)

(1/13)