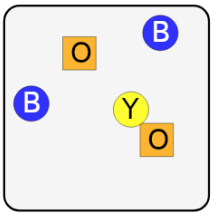
Name

Define discrete random variables

1

List all the possible outcomes.



A blue circle, yellow circle, orange square

B blue circle, yellow circle, orange square, red circle

C blue circle, yellow circle, orange square, green circle, orange circle

D blue circle, yellow circle, orange square, red square

2

Experiment: flip 5 coins. Let X = the number of tails. What values can X take?

A {1, 2, 3, 4, 5, 6}

B {0, 1, 2, 3, 4, 5}

C {0, 1, 2, 3, 4, 5, 6}

D {1, 2, 3, 4, 5}

3

Experiment: flip 2 coins. Let X = the number of heads. Which list shows every outcome that gives X = 1?

A {HH}

B {HH, HT, TH}

C {HT}

D {HT, TH}

4

Experiment: flip 3 coins. Let X = the number of heads. Which partial outcome table lists X correctly for its outcomes?

A

Outcome	X
HHT	1
HTH	1
HHH	0
...	...

B

Outcome	X
HHT	2
HTH	2
HHH	3
...	...

C

Outcome	X
HHT	3
HTH	3
HHH	3
...	...

D

Outcome	X
HHT	3
HTH	3
HHH	4
...	...

5

Experiment: spin a spinner 4 times. Which of these could be the random variable X?

A

The probability of landing on red

B

The number of times it lands on red

6

Experiment: roll two dice. Which of these could be the random variable X?

A

The probability of rolling a sum of 7

B

The sum of the two dice

7

Experiment: Flip coins until the first Head. Which of these could be the random variable X?

A

Number of flips required

B

Probability the first Head is on the third flip

© Mobius Math Academy

Name



Define discrete random variables

8

Experiment: flip 2 coins. Let X = the number of heads. Which partial outcome table lists X correctly for its outcomes?

A

Outcome	X
TT	2
TH	1
HT	1
...	...

B

Outcome	X
TT	2
TH	2
HT	2
...	...

C

Outcome	X
TT	0
TH	1
HT	1
...	...

D

Outcome	X
TT	1
TH	2
HT	2
...	...

9

Experiment: flip 3 coins. Let X = the number of heads. Which partial outcome table lists X correctly for its outcomes?

A

Outcome	X
HHH	3
HTH	2
HHT	2
...	...

B

Outcome	X
HHH	3
HTH	3
HHT	3
...	...

C

Outcome	X
HHH	0
HTH	1
HHT	1
...	...

D

Outcome	X
HHH	4
HTH	3
HHT	3
...	...

10

Experiment: flip 3 coins. Let X = the number of heads. Which partial outcome table lists X correctly for its outcomes?

A

Outcome	X
HTT	2
TTT	3
HTH	1
...	...

B

Outcome	X
HTT	1
TTT	0
HTH	2
...	...

C

Outcome	X
HTT	2
TTT	1
HTH	3
...	...

D

Outcome	X
HTT	3
TTT	3
HTH	3
...	...

11

Experiment: Survey a classroom. Which of these could be the random variable X?

A

Number of students wearing glasses

B

Whether anyone is wearing glasses