

☐ View hints ☐ View feedbackPlay All 

QUESTION 1



Choose the correct answer.

Which of the following situations would be represented by a discrete random variable?



the weight of a randomly selected mango at a certain farm



the age of a randomly selected tree in a forest



the number of visitors at any given time at a museum



the height of a randomly selected plant from a greenhouse

QUESTION 2



Which of the following situations would be represented by a discrete random variable?



the number of pears on a randomly selected pear tree at a farm



the amount of sand in a randomly selected person's shoe after walking on the beach

☐

the length a randomly selected person on a golf course hits a golf ball

☐

the amount of rain in a day in a place randomly selected around the world

☒

the number of pages of a research paper a randomly selected student wrote

☐

the depth of the ocean floor one mile from a randomly selected coast

QUESTION 3



Choose the correct answer.

Which of the following situations would be represented by a continuous random variable?

☐

the number of times a red marble is pulled at random from a bag of marbles

☐

the number of times heads shows after flipping a coin 100 times

☐

the number of people chosen at random at a park that took swimming lessons

☒

the exact amount of time any student in a class took to read an assigned chapter



QUESTION 4

Choose the correct answer.

Which of the following situations would be represented by a discrete random variable?

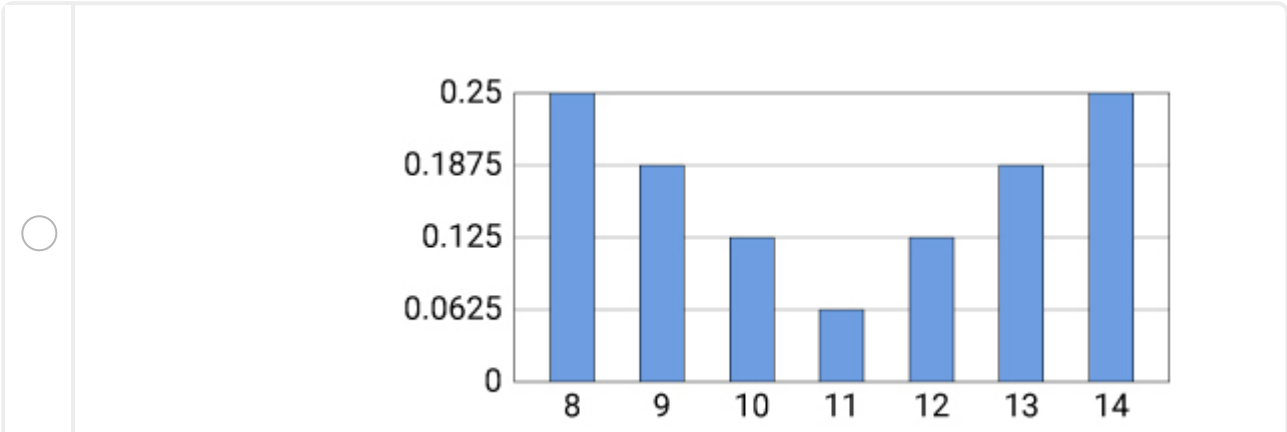
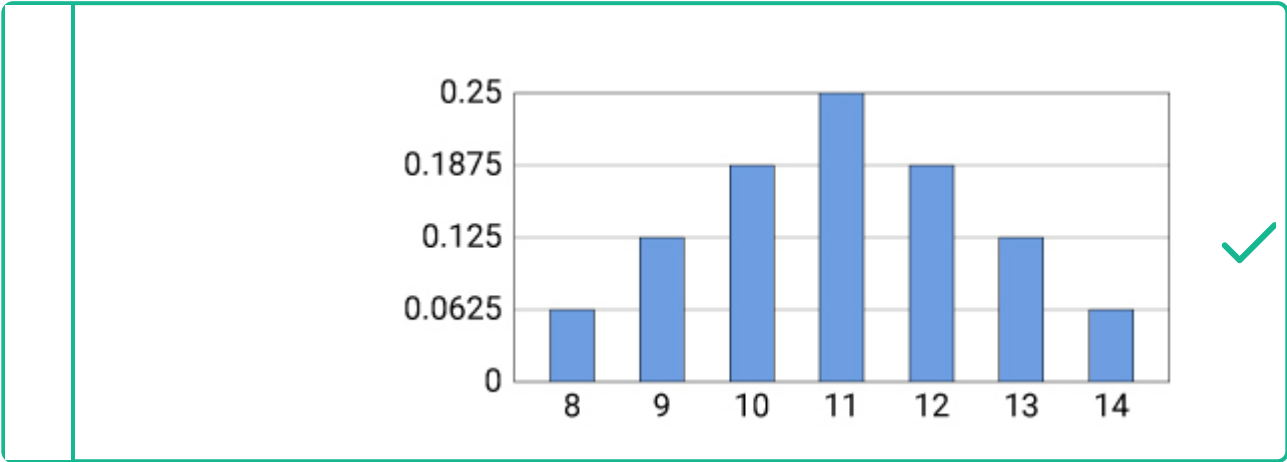
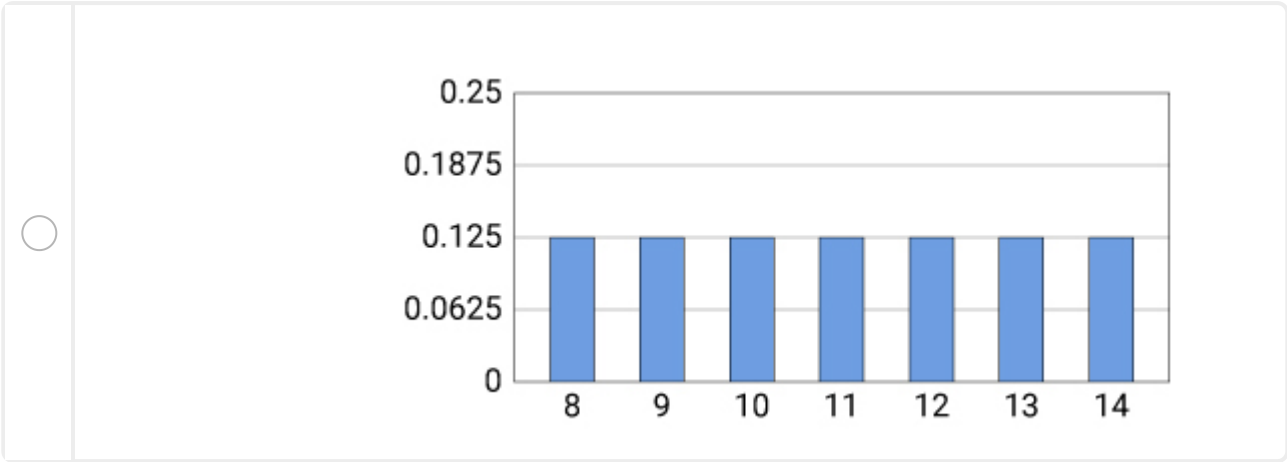
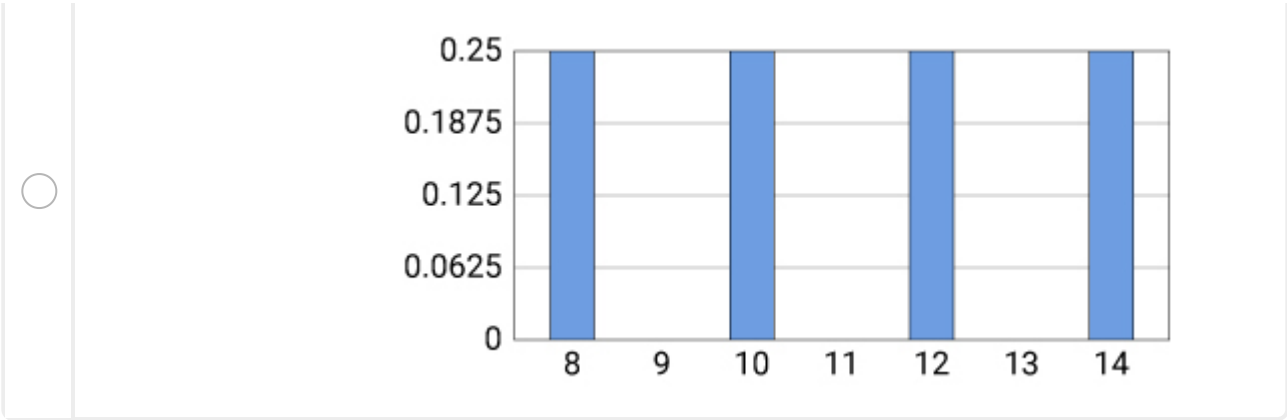
- ☒ the number of coins in a random selection of coin collections
- ☐ the distance from the park to any student's house in your class
- ☐ the exact temperature inside any car in a parking lot
- ☐ the amount of daylight in any day

QUESTION 5

Choose the correct answer.

Which graph shows the theoretical probability distribution represented in this relative frequency table where X is the discrete random variable?

X	8	9	10	11	12
Relative Frequency	$\frac{1}{16}$	$\frac{2}{16}$	$\frac{3}{16}$	$\frac{4}{16}$	$\frac{3}{16}$



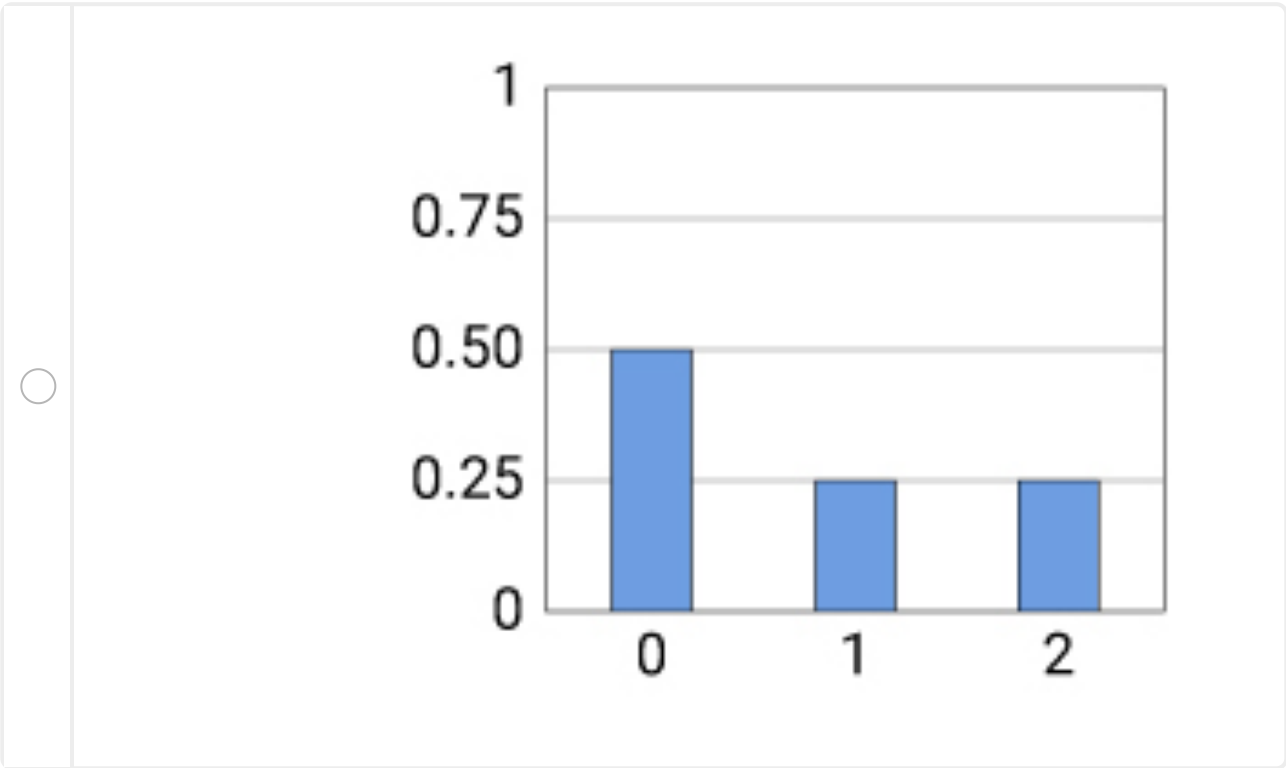
QUESTION 6



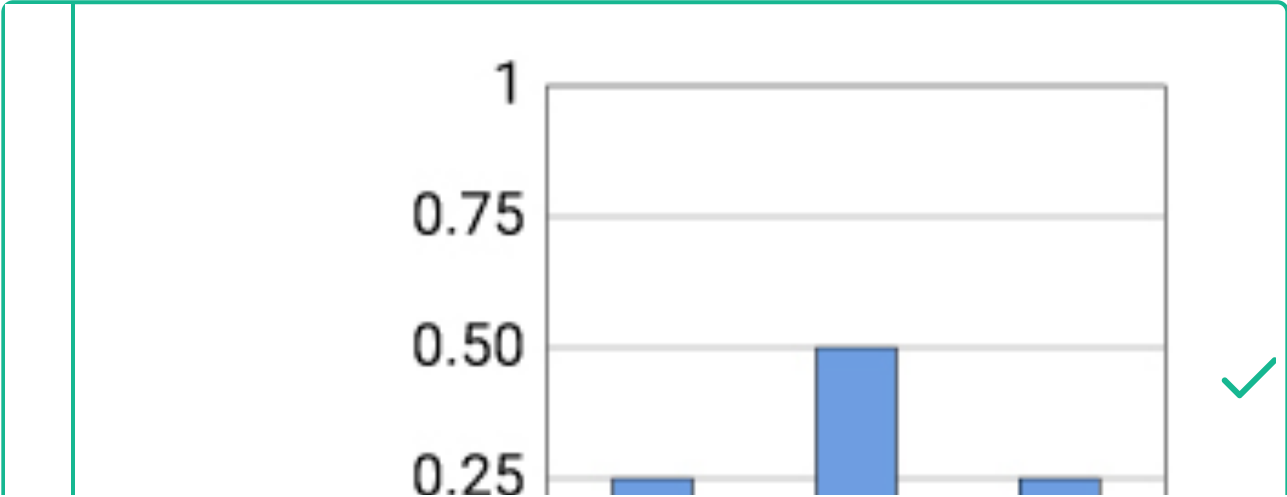
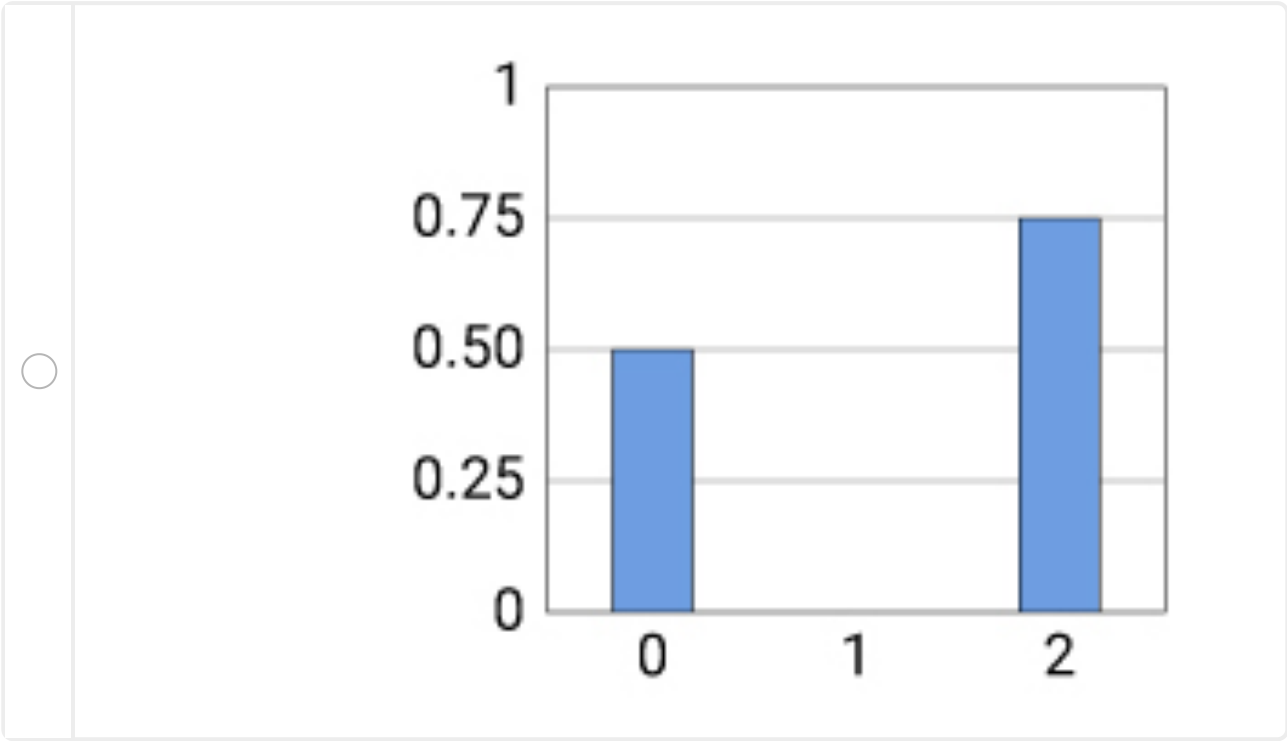
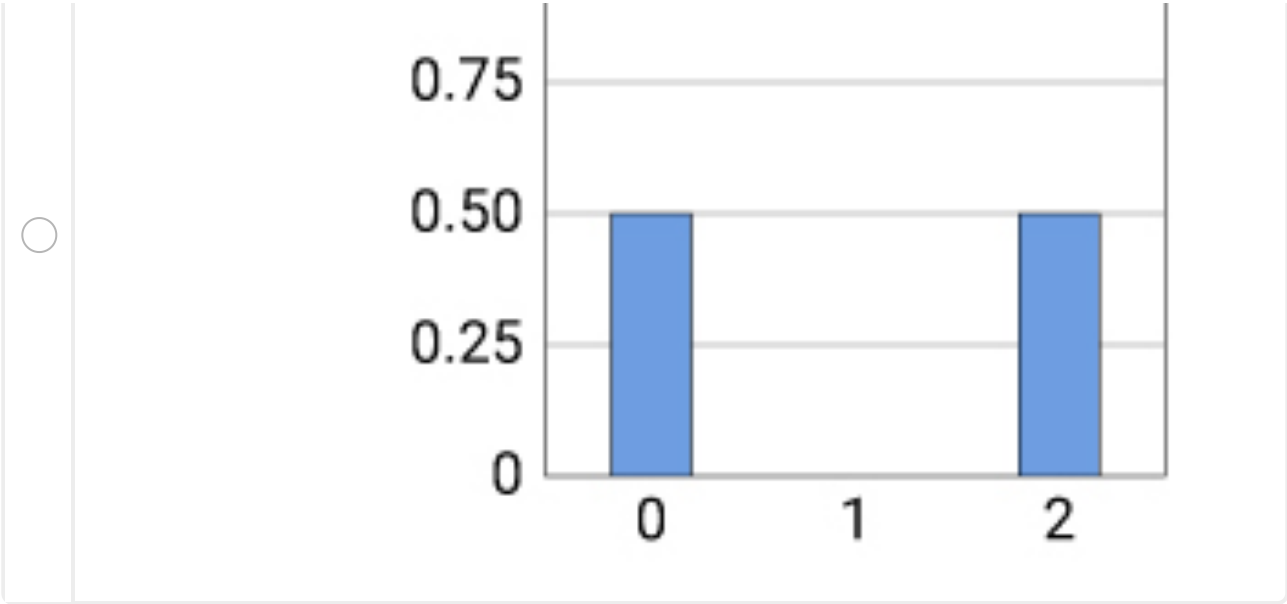
Choose the correct answer.

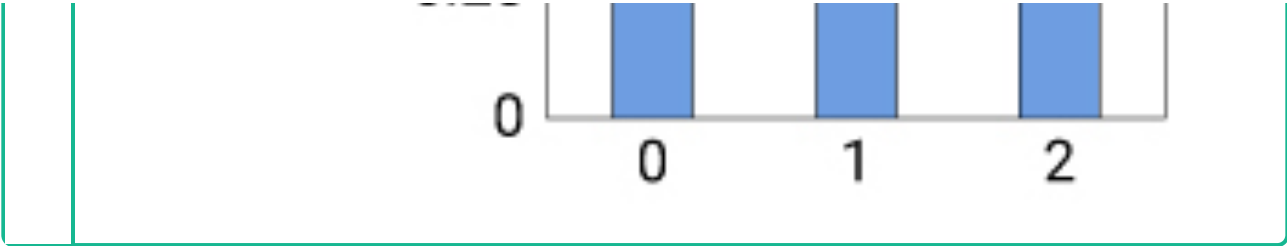
Which graph shows the theoretical probability distribution represented in this relative frequency table where X is the discrete random variable?

X	0	1	2
Relative Frequency	$\frac{1}{4}$	$\frac{2}{4}$	$\frac{1}{4}$



1





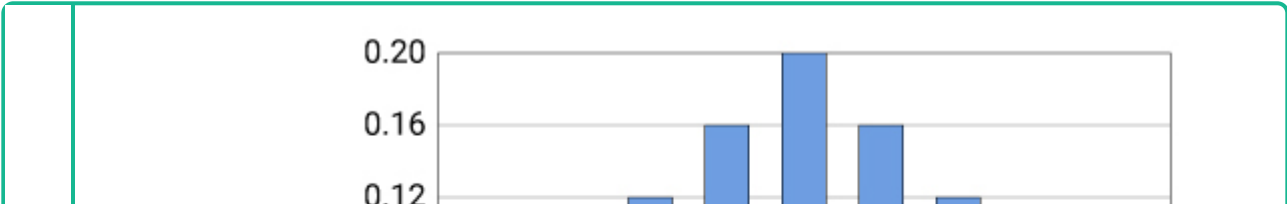
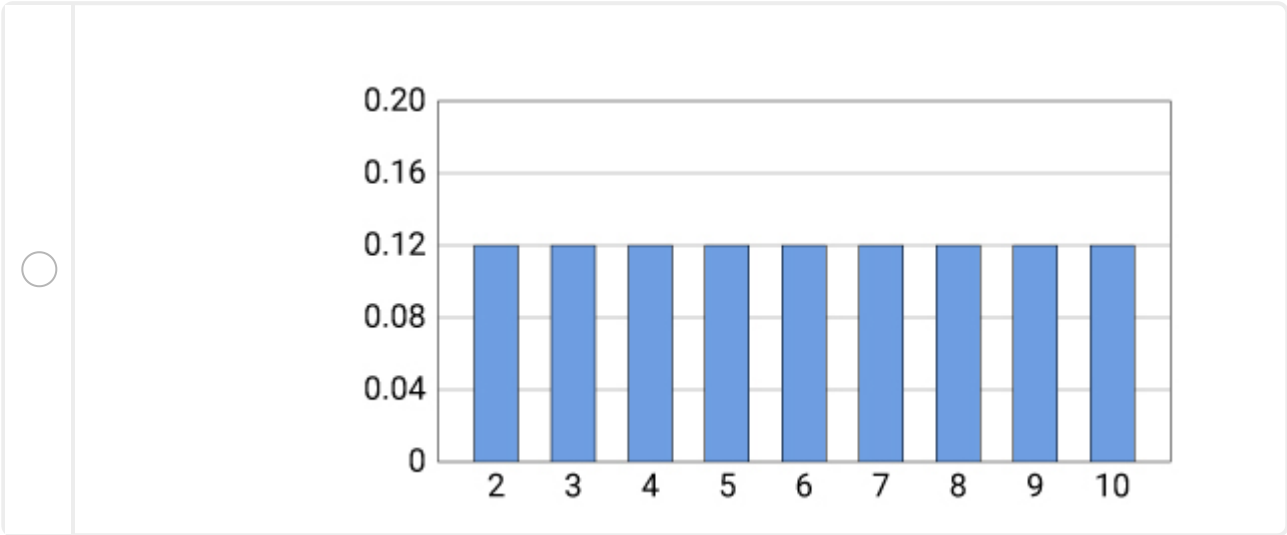
QUESTION 7

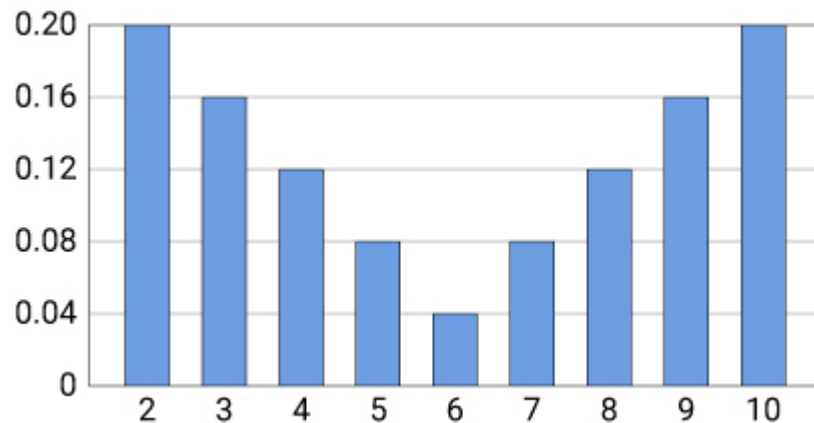
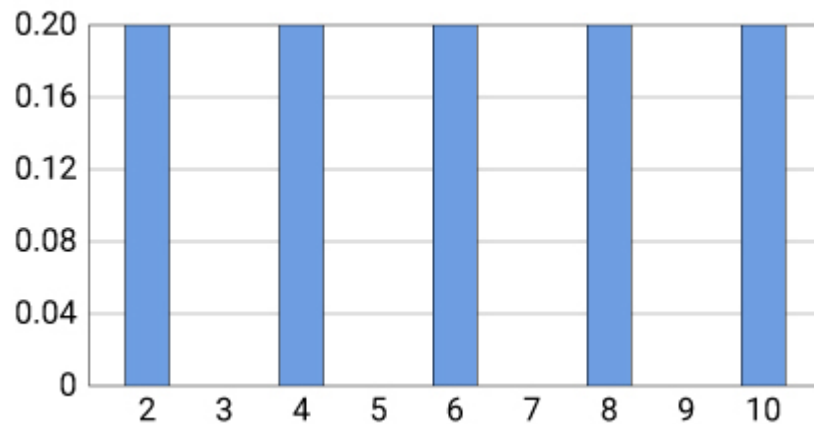
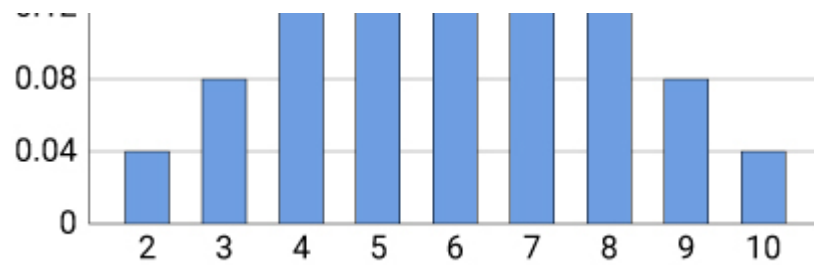


Choose the correct answer.

Which graph shows the theoretical probability distribution represented in this relative frequency table where X is the discrete random variable?

X	2	3	4	5	
Relative Frequency	$\frac{1}{25}$	$\frac{2}{25}$	$\frac{3}{25}$	$\frac{4}{25}$	





QUESTION 8

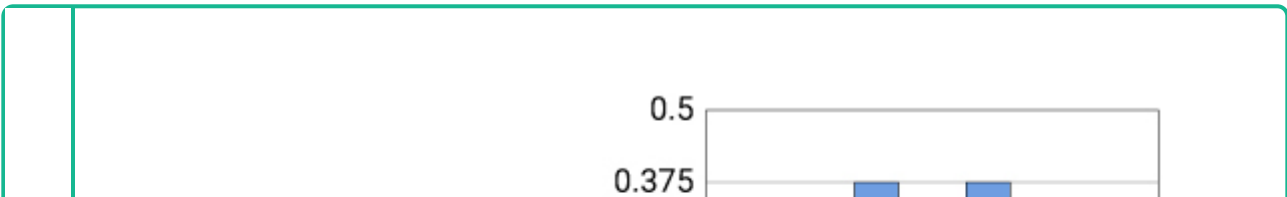
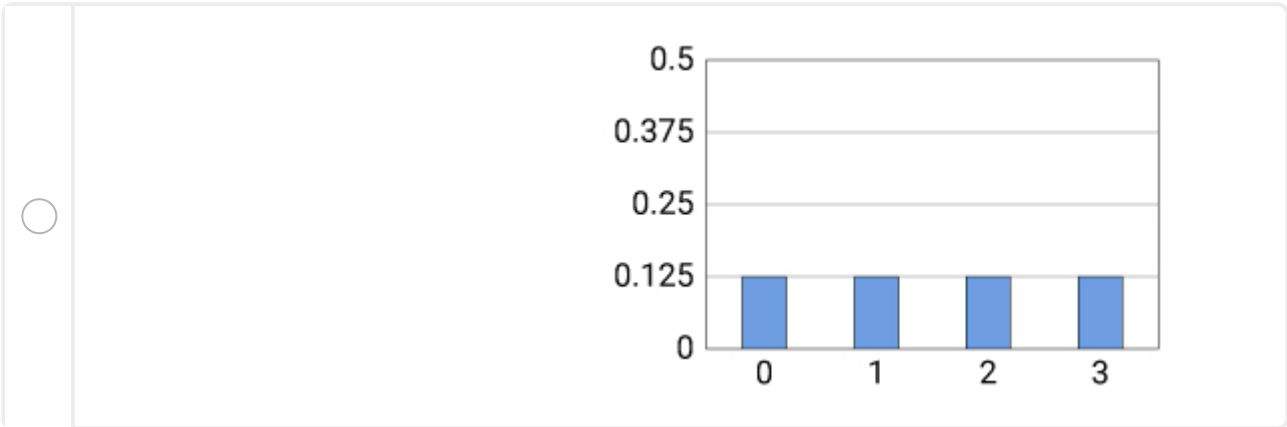
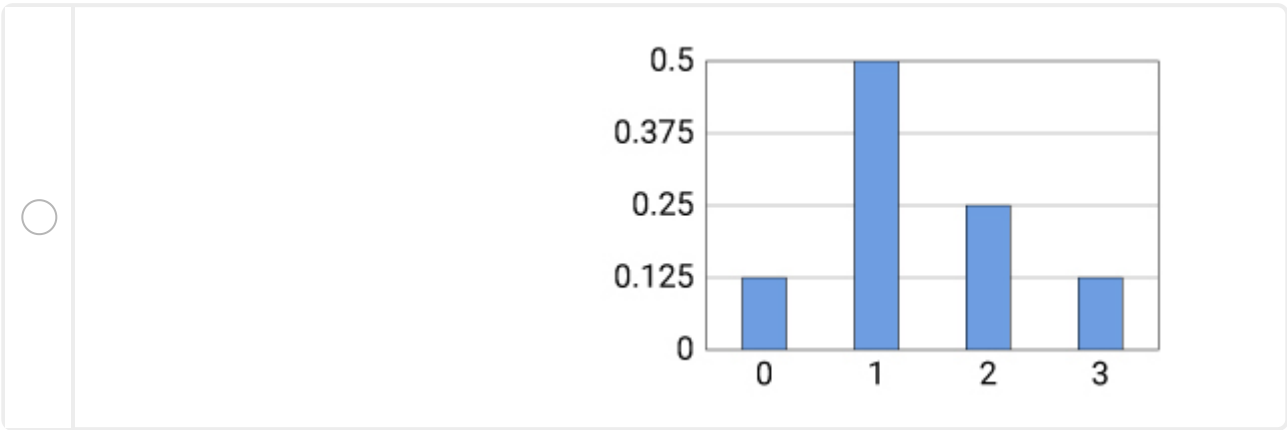
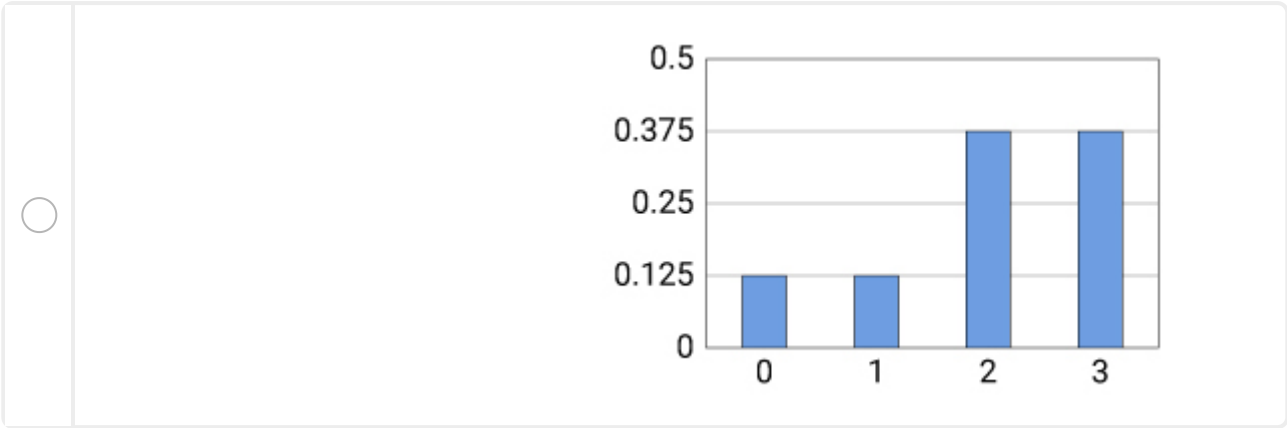


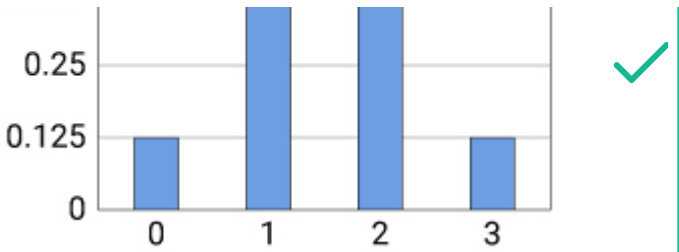
Choose the correct answer.

Which graph shows the theoretical probability distribution represented in this relative frequency table where X is the discrete random variable?



X	0	1	2	3
Relative Frequency	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{8}$





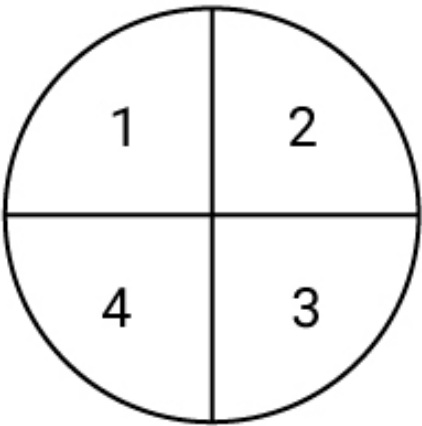
QUESTION 9



Fill in the blanks with the correct answer.

A spinner with four equal-sized sections numbered 1 through 4 is spun twice and the results of each spin are added together.

Construct a relative frequency table for the theoretical probability distribution.
Enter your answers in the spaces provided.



Sum	2	
Relative Frequency	0.0625	0.125
Sum	6	7
Relative Frequency	0.1875	

QUESTION 10

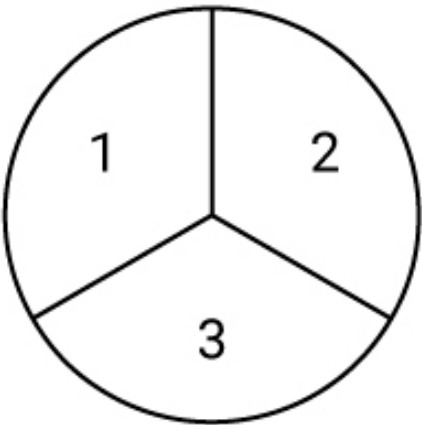


Fill in the blanks with the correct answer.

A spinner with three equal-sized sections numbered 1 through 3 is spun twice and the results of each spin are added together.

Construct a relative frequency table for the theoretical probability distribution.

Enter your answers in the spaces provided.



Sum	2 ✓	
Relative Frequency	$\frac{1}{9}$	$\frac{2}{9}$
Sum	5 ✓	
Relative Frequency	$\frac{2}{9}$	

		$\frac{1}{9}$

QUESTION 11

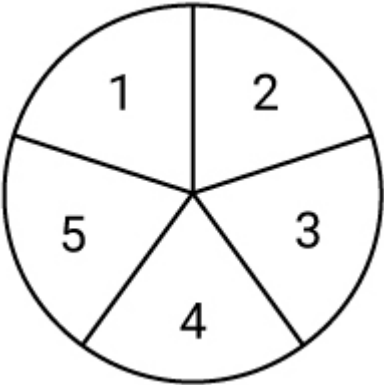


Fill in the blanks with the correct answer.

A spinner with five equal-sized sections numbered 1 through 5 is spun twice and the results of each spin are added together.

Construct a relative frequency table for the theoretical probability distribution.

Drag and drop your answers to correctly complete the table.



Sum	2	3
Relative Frequency	0.04	0.08
Sum	6	7
Relative Frequency	0.2	0.16

Sum	10	
Relative Frequency	0.04	

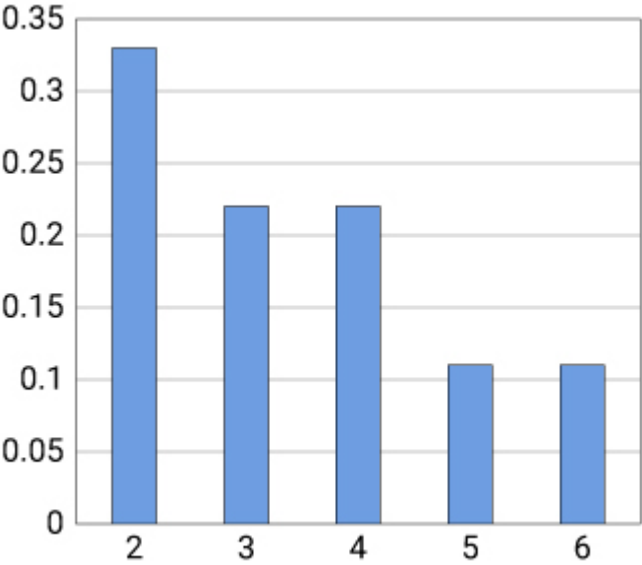
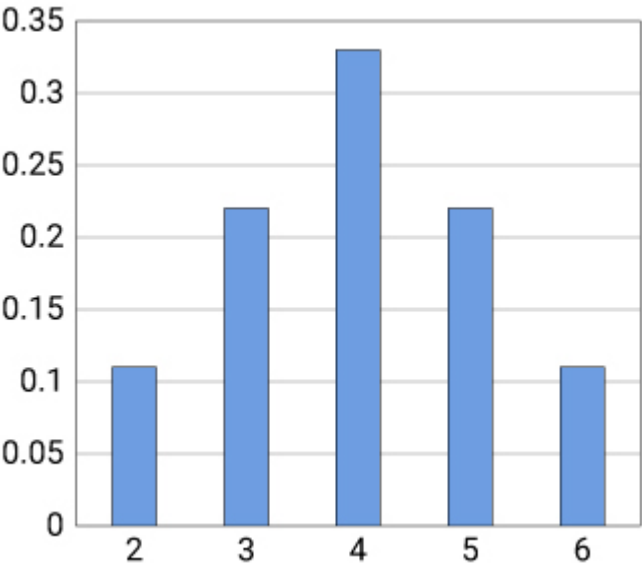
QUESTION 12

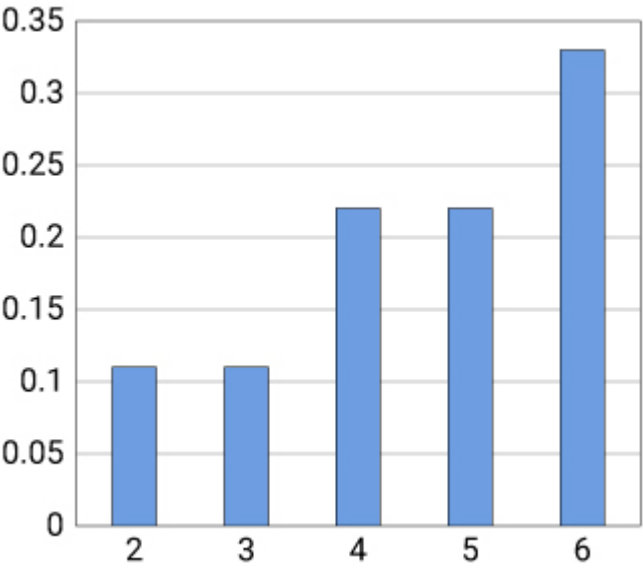
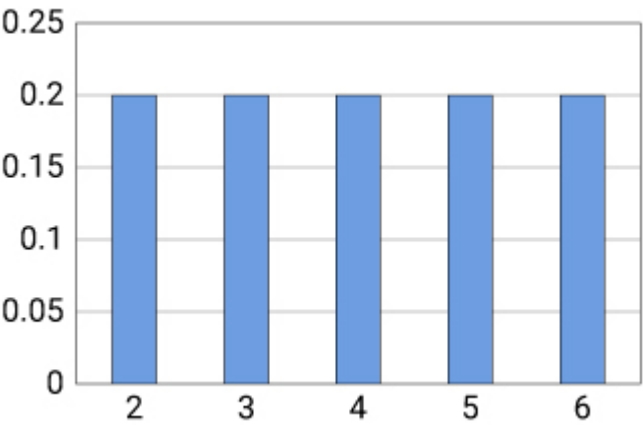


Choose the correct answer.

Which graph shows the theoretical probability distribution represented in this relative frequency table where X is the discrete random variable?

X	2	3	4	5	
Relative Frequency	$\frac{1}{9}$	$\frac{2}{9}$	$\frac{3}{9}$	$\frac{2}{9}$	







QUESTION 13

Fill in the blanks with the correct answer.

A number cube is rolled twice and the results of each roll are added together.

Construct a relative frequency table for the theoretical probability distribution.

Drag and drop your answers to correctly complete the table.

Sum	2	3
Relative Frequency	$\frac{1}{36}$ ✓	$\frac{2}{36}$
Sum	6	7
Relative Frequency	$\frac{5}{36}$	$\frac{6}{36}$
Sum	10	11
Relative Frequency	$\frac{3}{36}$ ✓	$\frac{2}{36}$

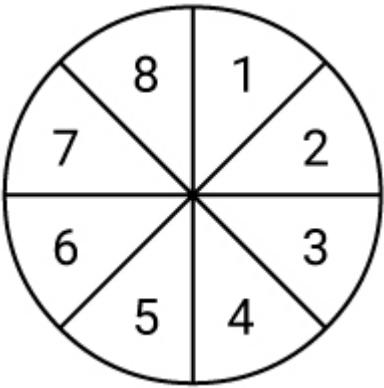


QUESTION 14

Fill in the blanks with the correct answer.

A spinner with eight equal-sized sections numbered 1 through 8 is spun twice and the results of each spin are added together. Construct a relative frequency table for the theoretical probability distribution.

Drag and drop your answers to correctly complete the table.



Sum	2	3
Relative Frequency	$\frac{1}{64}$ ✓	$\frac{2}{64}$
Sum	6	7
Relative Frequency	$\frac{5}{64}$	$\frac{6}{64}$
Sum	10	11
Relative Frequency	$\frac{7}{64}$	$\frac{6}{64}$
Sum	14	15
Relative Frequency	$\frac{3}{64}$	$\frac{2}{64}$

◀

▶

QUESTION 15



Which of the following situations would be represented by a continuous random variable?

☐

the number of magazines in the waiting room of a randomly selected doctor's office

☒

the height of a randomly selected sand dune located in a certain region

☒

the amount of time a randomly selected cyclist rides his or her bike over the weekend

☐

the number of books read in a year of a person randomly selected at a book store

☐

the amount of a grocery bill of a customer randomly selected at the store

☐

the number of photos on a randomly selected person's cell phone

QUESTION 16



Fill in the blanks with the correct answer.

X represents the sum of the values found by rolling two number octahedrons. Each octahedron has 8 faces and is numbered 1 to 8. The tally table shows **part** of the results of rolling the number octahedrons 100 times. Complete the relative frequency column by calculating each experimental probability.

Drag and drop your answers to correctly complete the table.

Sum	Tally	Frequency	Relative Frequency
2		2	0.02 ✓
3		3	0.03
4		5	0.05 ✓
5	 	6	0.06
6	 	7	0.07 ✓
7	 	9	0.09
8	 	11	0.11 ✓

5

2

0.5

7

0.2

11



QUESTION 17

Fill in the blanks with the correct answer.

X represents the sum of the values found by rolling two number cubes. The tally table shows part of the results of rolling the number cubes 100 times. Complete the relative frequency column by calculating each experimental probability.

Drag and drop your answers to correctly complete the table.

Sum	Tally	Frequency	Relative Frequency
2		2	0.02 ✓
3		4	0.04
4		7	0.07 ✓
5		10	0.1
6		19	0.19 ✓
7		20	0.2

8		15	0.15 ✓

2

7

0.7

0.2

15

19

QUESTION 18



Fill in the blanks with the correct answer.

X represents the number of heads after tossing 3 coins. The tally table shows the result of tossing three coins 100 times.
Complete the relative frequency column by calculating each experimental probability. Enter as a decimal.

Enter your answers in the spaces provided.

Number of Heads	Tally	Frequency	Relative Frequency
0		15	0.15 ✓

1		37	0.37
2		34	0.34
3		14	0.14

--	---	--	--

QUESTION 19



Fill in the blanks with the correct answer.

X represents the sum of the values found by spinning a spinner with 4 equal sections numbered 1 to 4. The tally table shows the result of spinning the spinner twice 100 times. Complete the relative frequency column by calculating each experimental probability. Enter as a decimal.

Enter your answers in the spaces provided.

Sum	Tally	Frequency	Relative
2		7	0.07
3		10	0.1
4		18	0.18
5		26	0.26

6		19	0.19
7		12	0.12
8		8	0.08

QUESTION 20



Fill in the blanks with the correct answer.

X represents the sum of the values found by spinning a spinner with 5 equal sections numbered 1 to 5. The tally table shows the result of spinning the spinner twice 100 times. Complete the relative frequency column by calculating each experimental probability. Enter your answers in the spaces provided.

Sum	Tally	Frequency	Relative Frequency
2		5	0.05 ✓
3	 	8	0.08 ✓
4	 	11	0.11 ✓
5	 	16	0.16 ✓
6	 	22	0.22 ✓
7		15	0.15 ✓

8		12	0.12 ✓
9		7	0.07 ✓
10		4	0.04 ✓
◀ ▶			

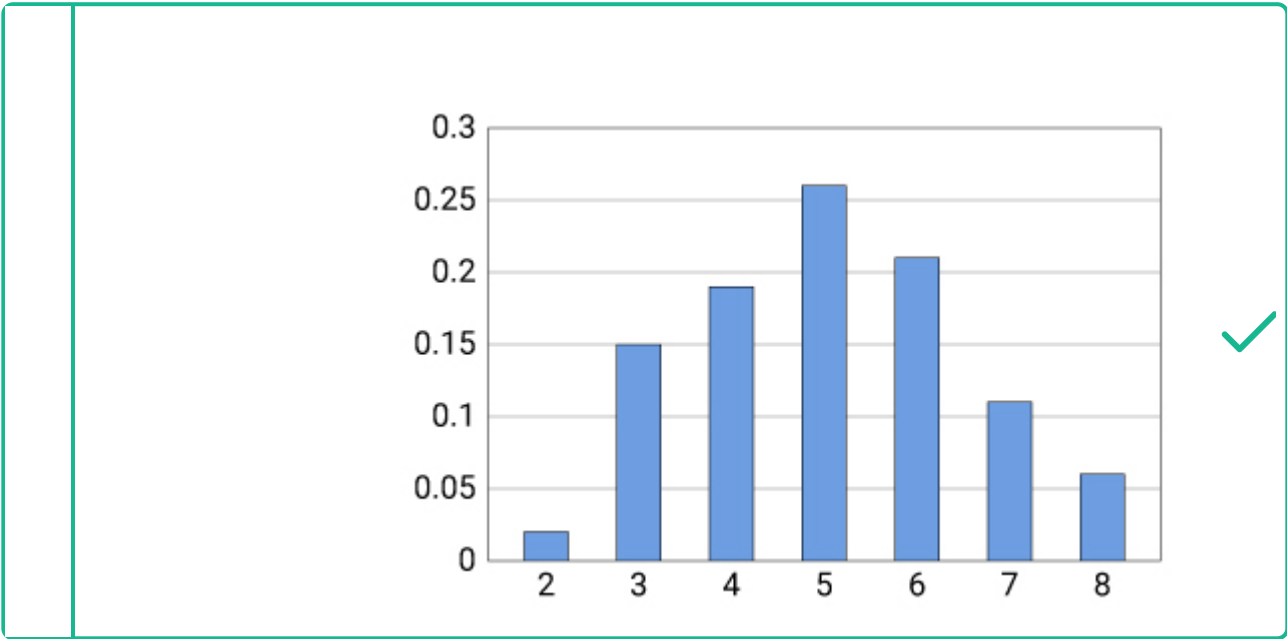
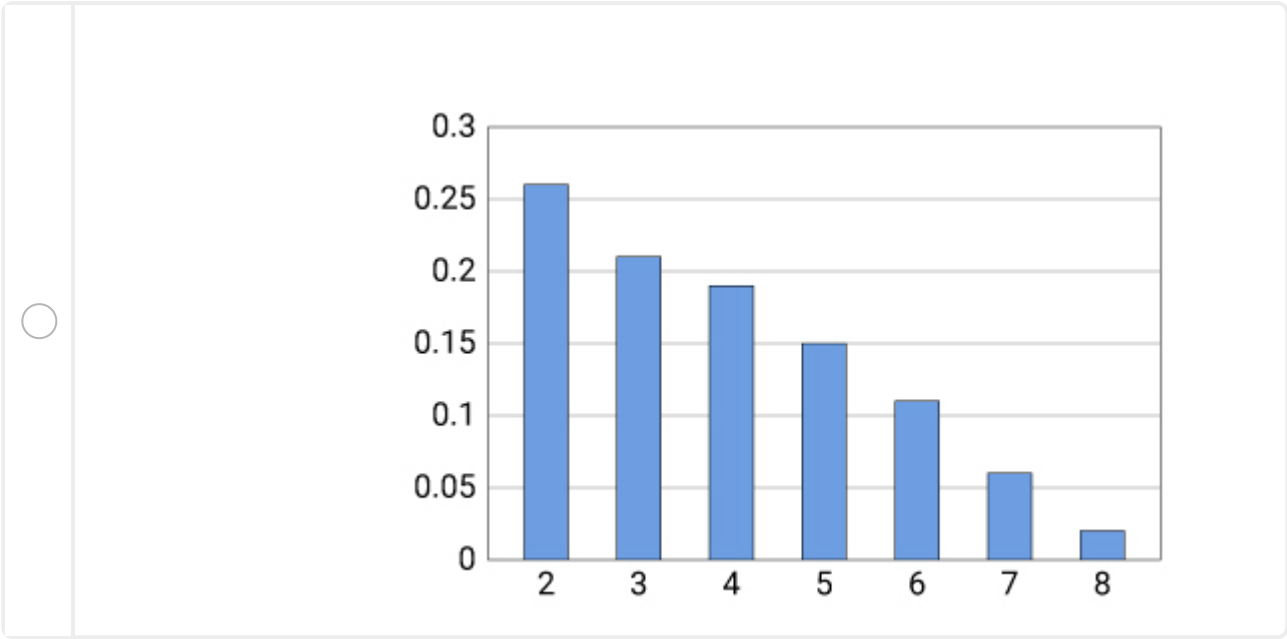
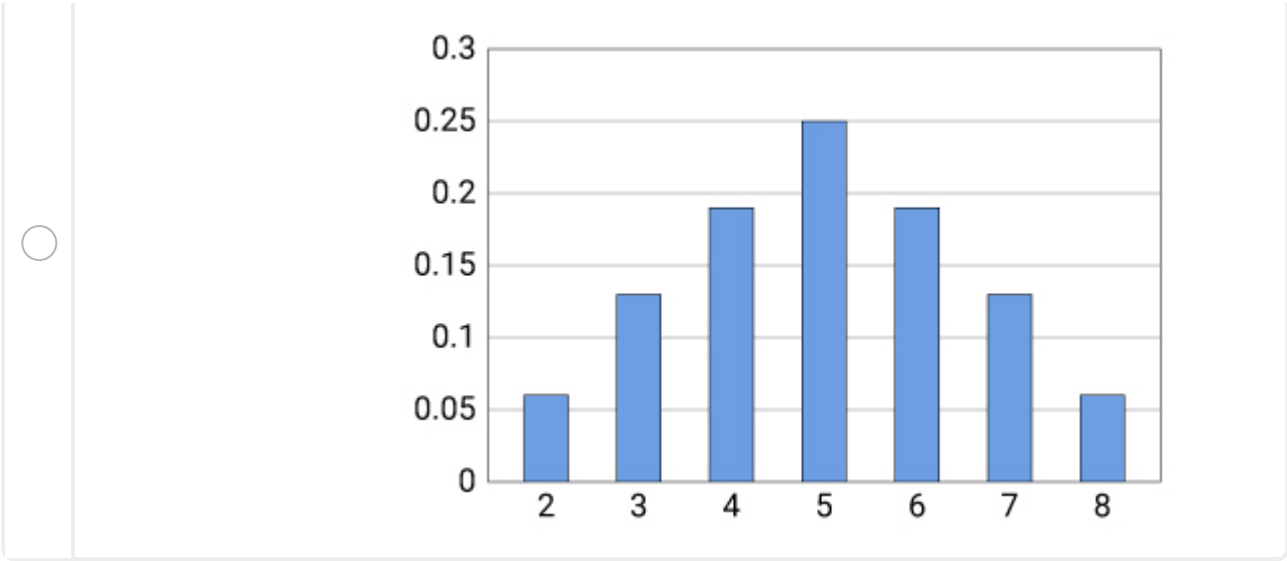
QUESTION 21

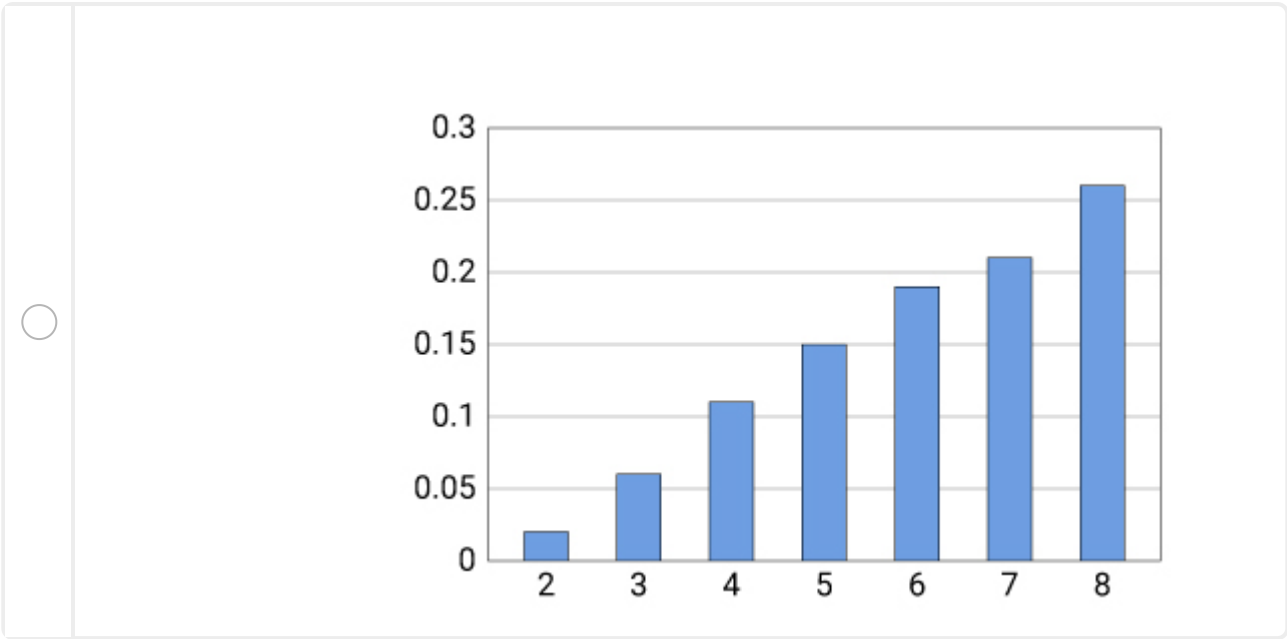


Choose the correct answer.

Which graph represents the experimental probability distribution represented in this relative frequency table?

Sum	2	3	4	5	6	7	8
Relative Frequency	0.02	0.15	0.19	0.26	0.21	0.11	0.06





QUESTION 22

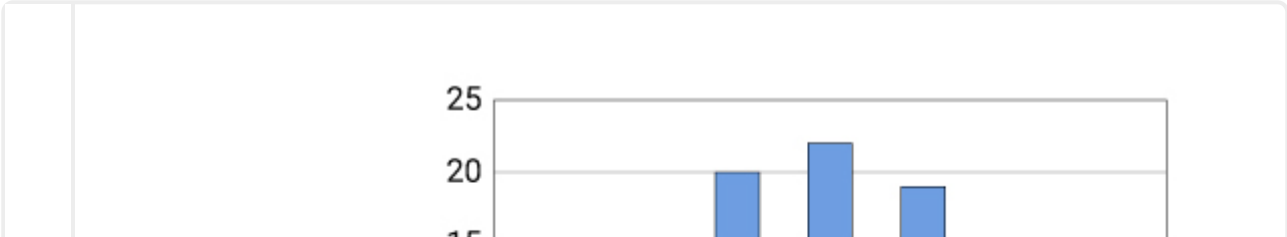
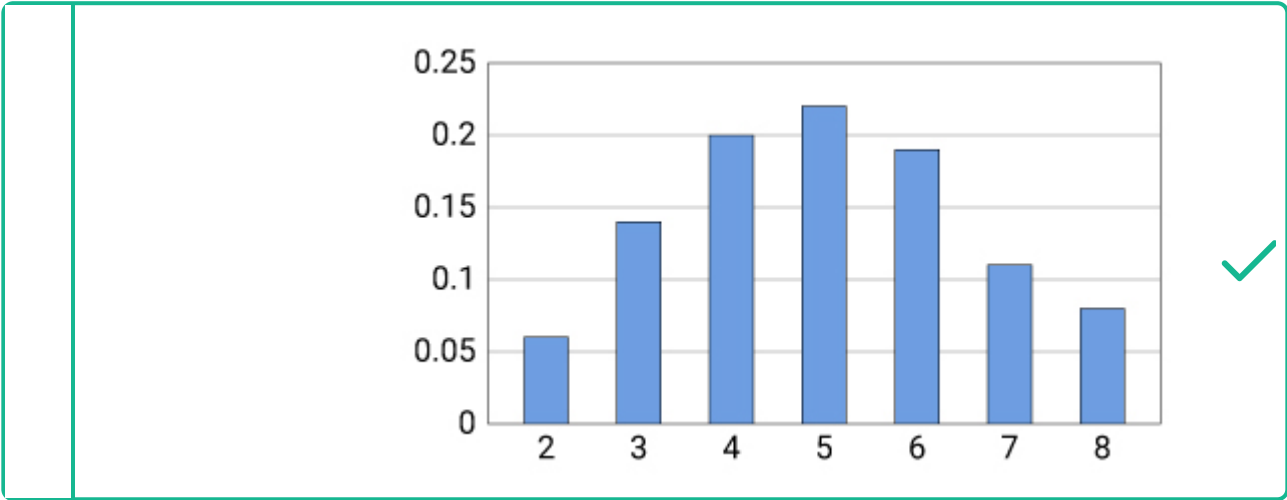


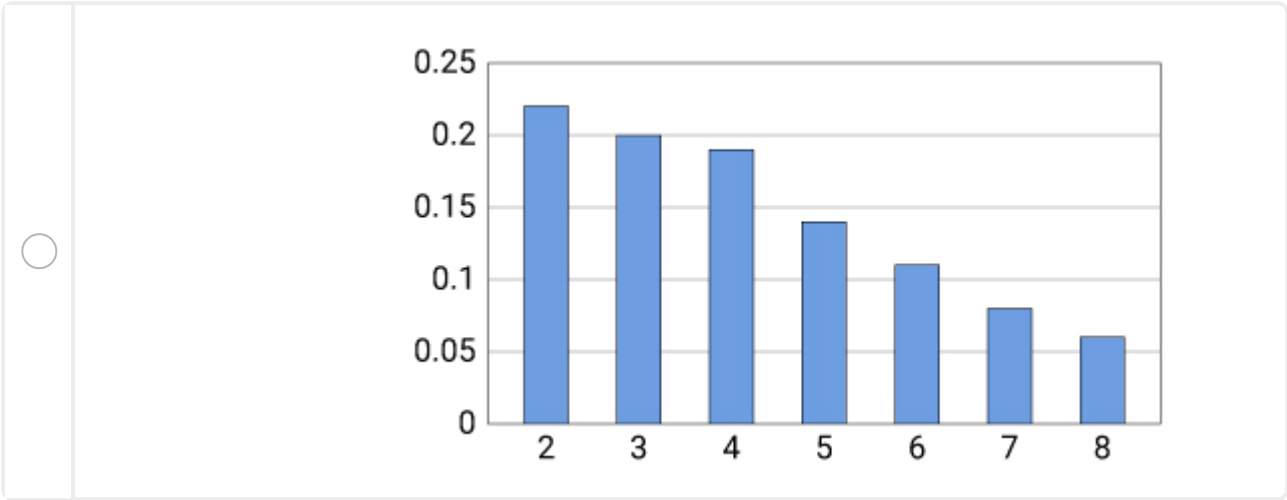
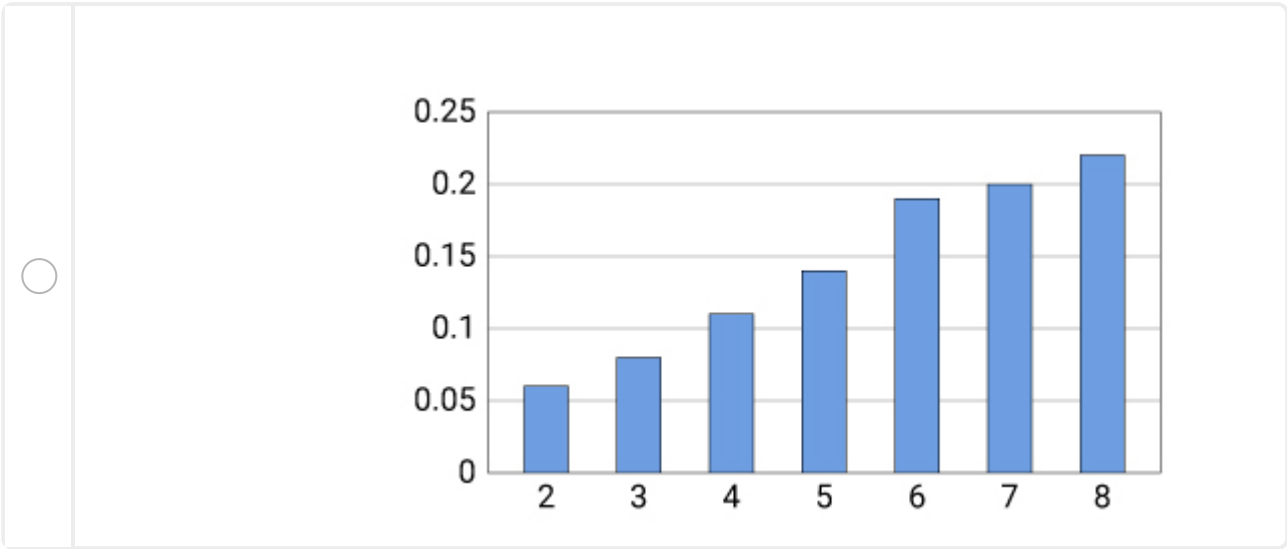
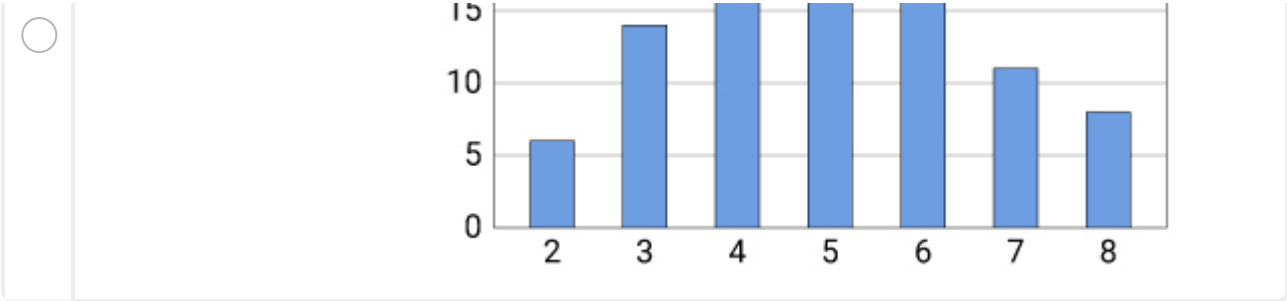
Choose the correct answer.

Use the tally table to graph the experimental probability distribution.

Sum	Tally	Frequency
2	 	6
3	 	14
4	 	20

		
5		22
6		19
7		11
8		8





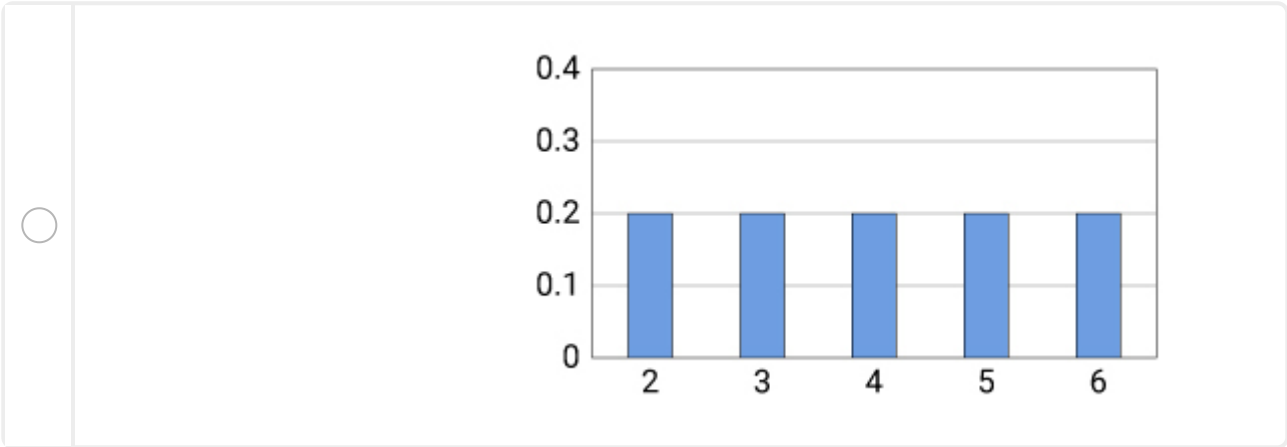
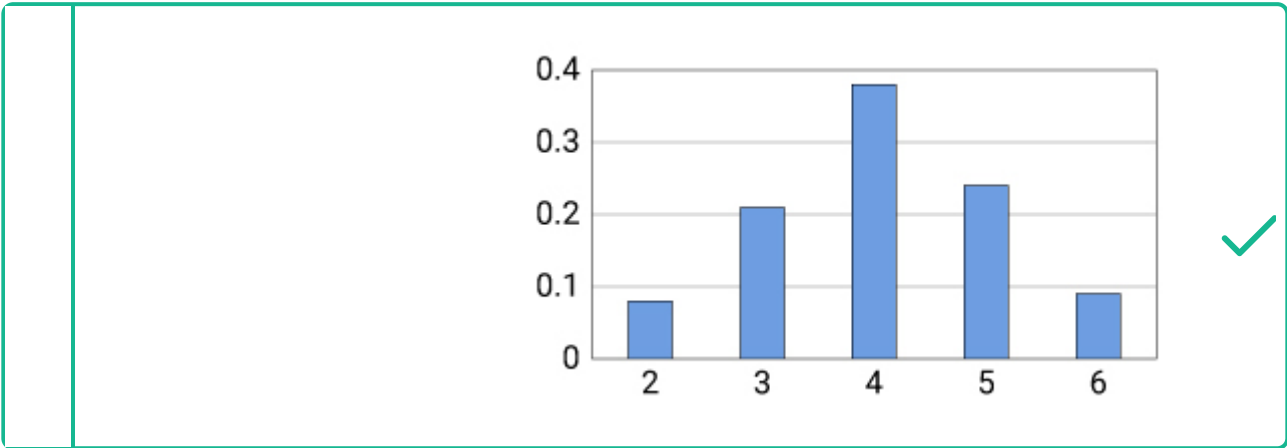
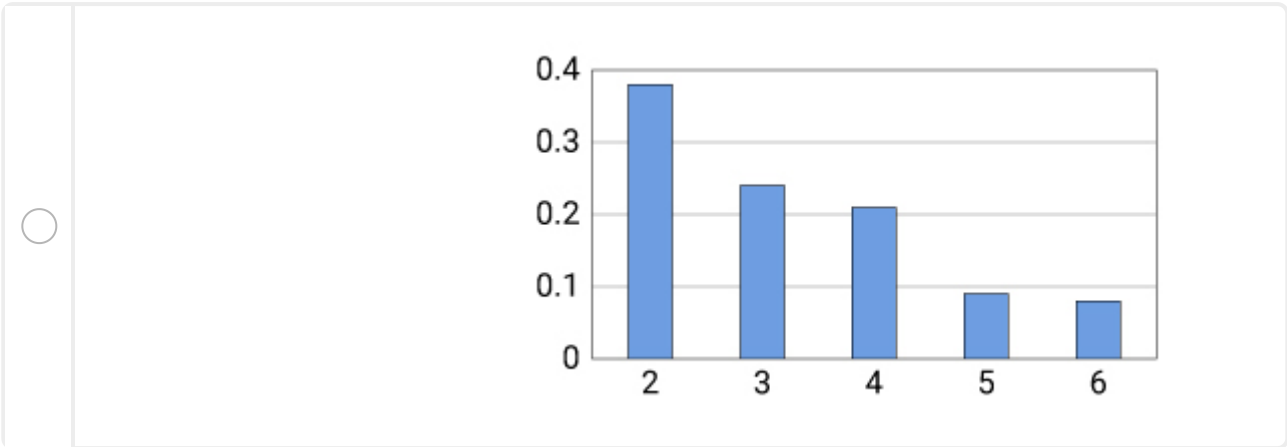
QUESTION 23

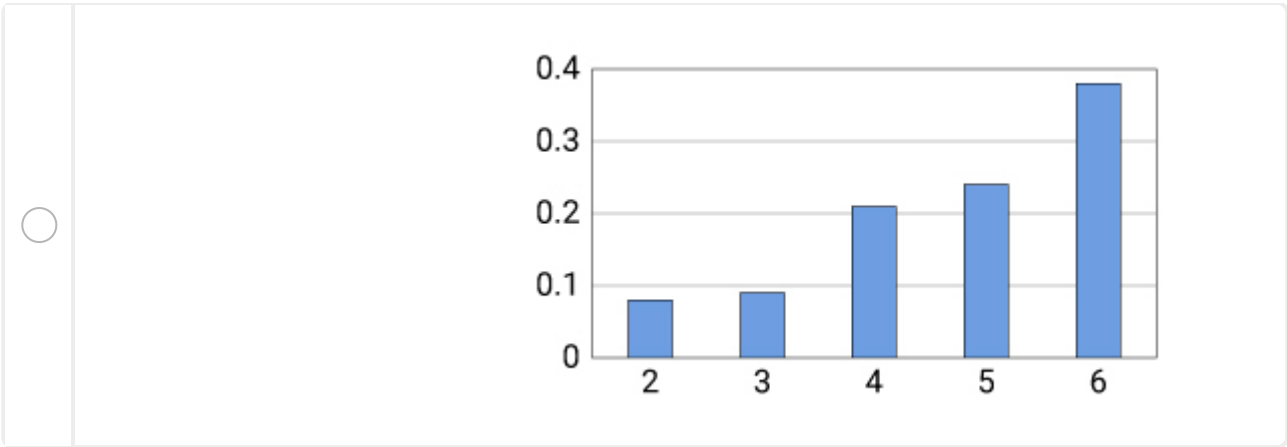


Choose the correct answer.

Which graph represents the experimental probability distribution represented in this relative frequency table?

Sum	2	3	4	5	6
Relative Frequency	0.08	0.21	0.38	0.24	0.09





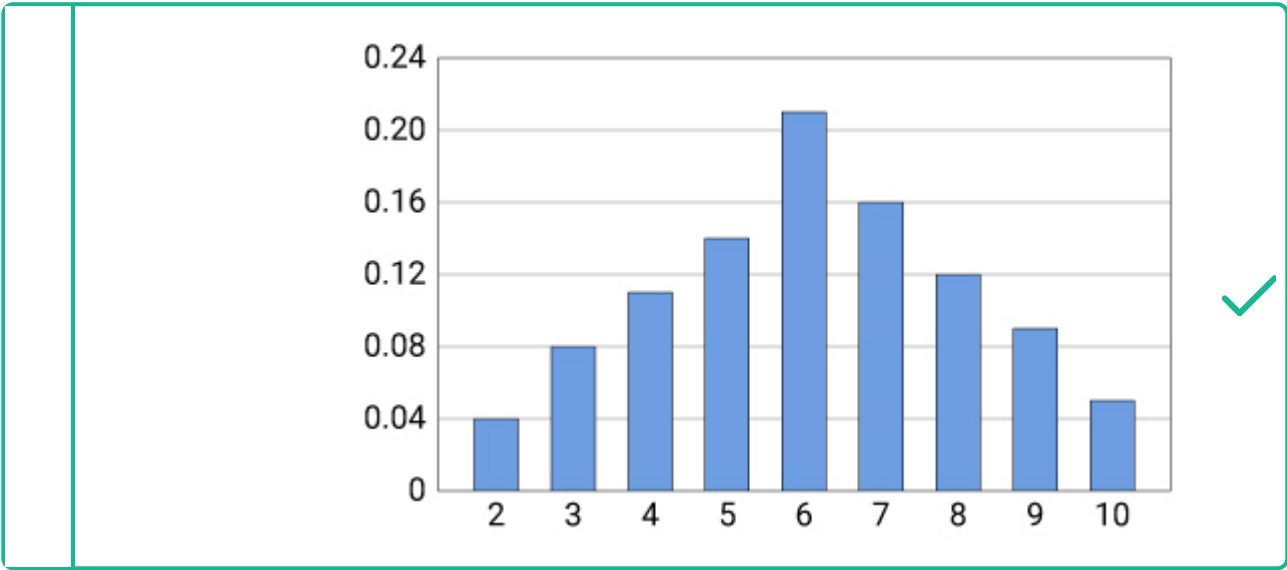
QUESTION 24

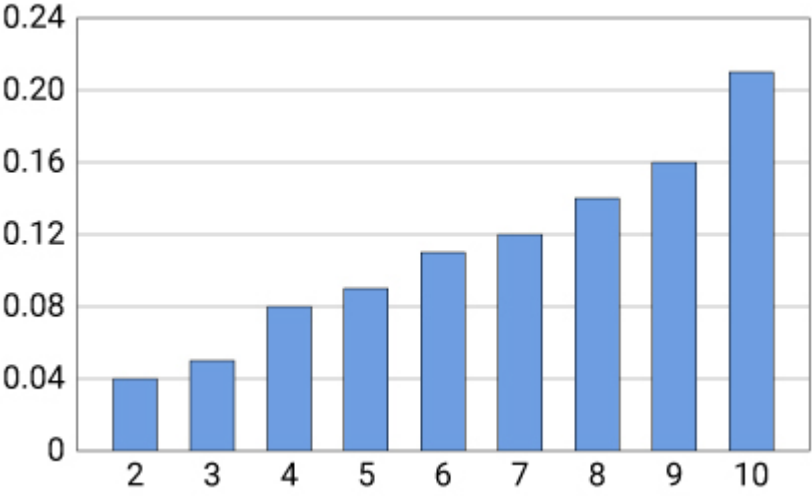
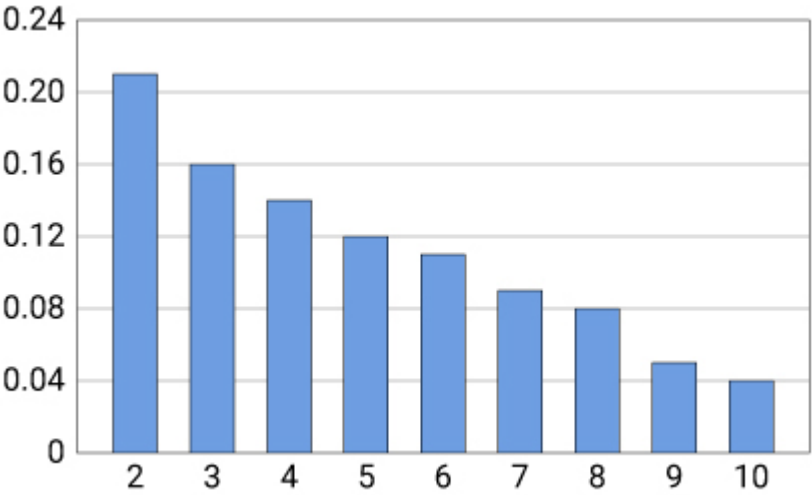
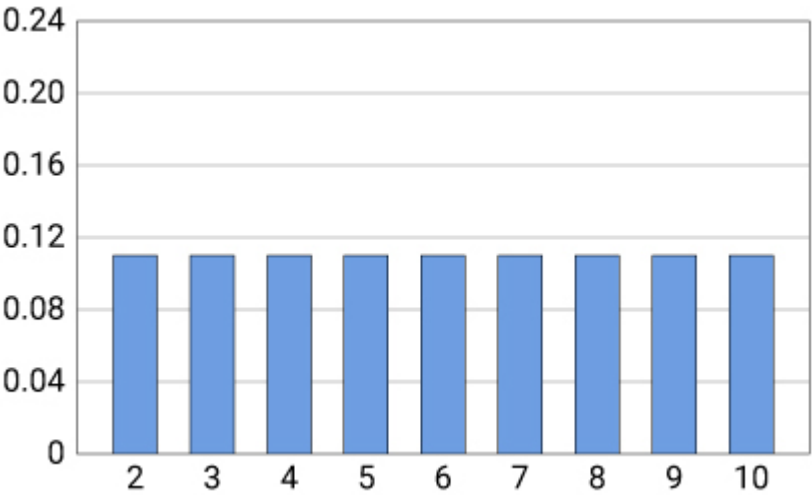


Choose the correct answer.

Which graph represents the experimental probability distribution represented in this relative frequency table?

Sum	2	3	4	5	6	7	8	9	10
Relative Frequency	0.04	0.08	0.11	0.14	0.21	0.16	0.12	0.09	0.05





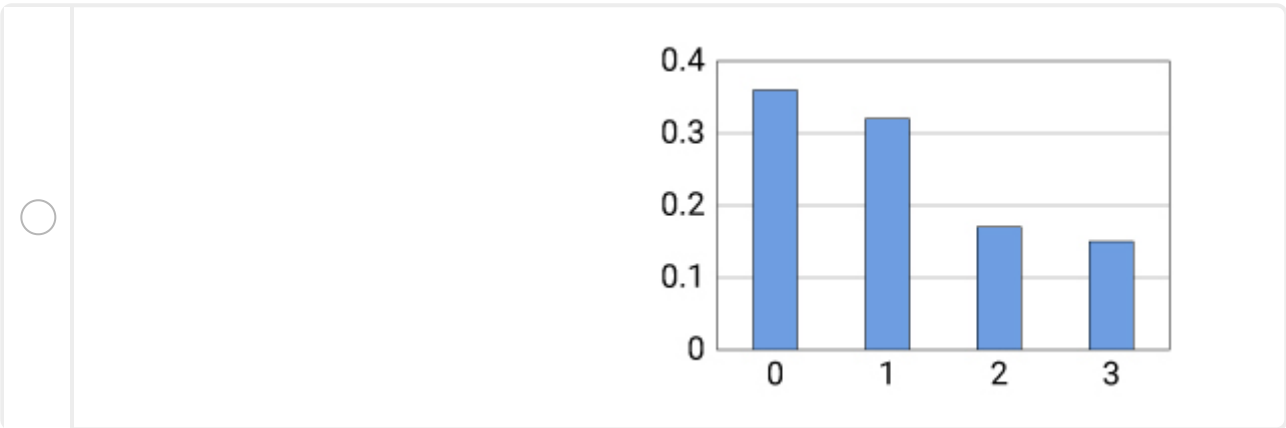
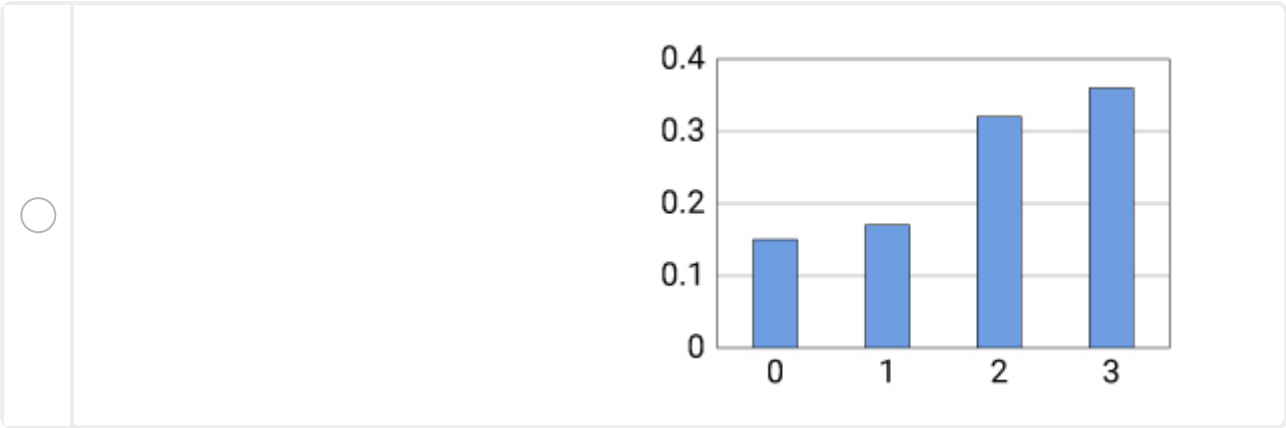
QUESTION 25

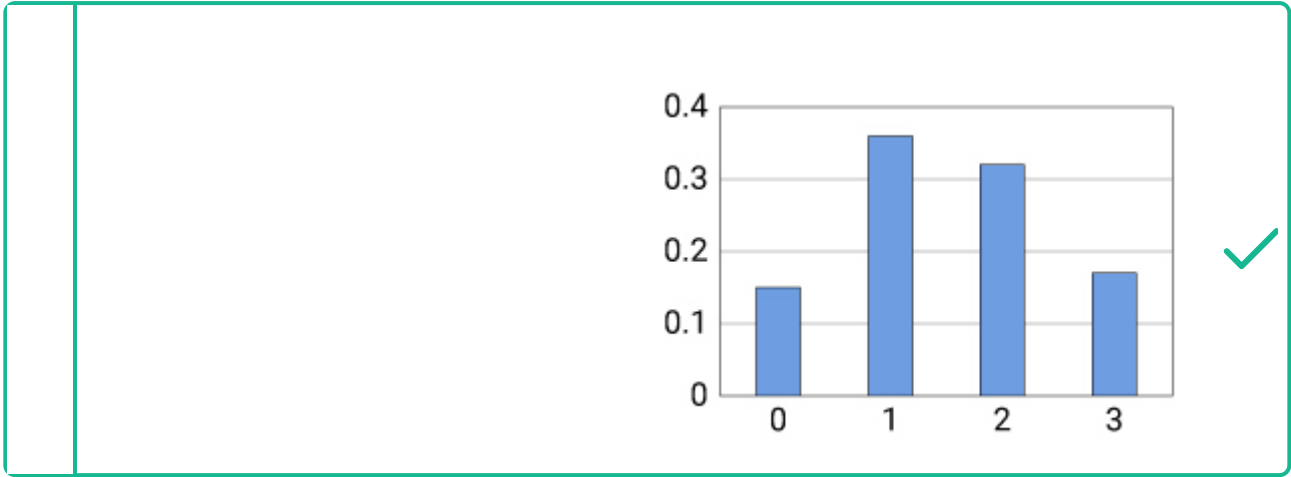
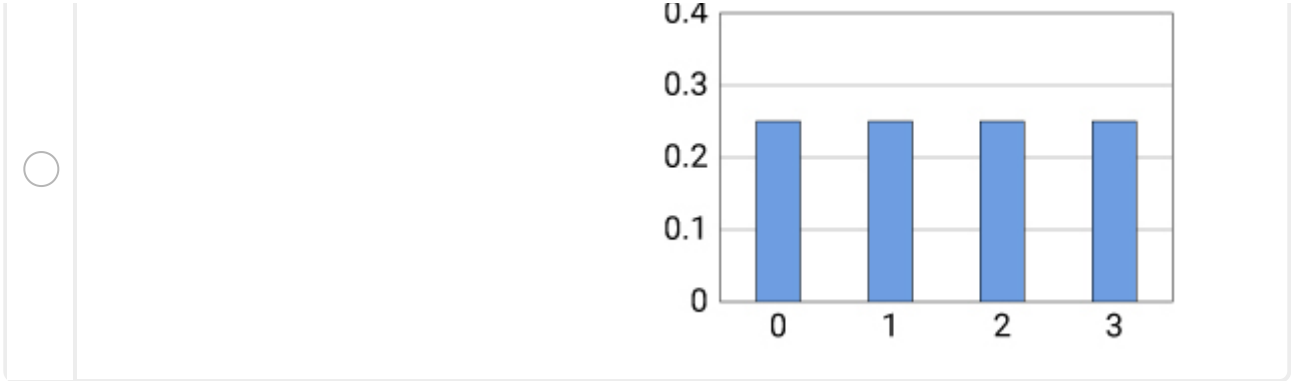


Choose the correct answer.

Which graph represents the experimental probability distribution represented in this relative frequency table?

Number of Heads	0	1	2	3
Relative Frequency	0.15	0.36	0.32	0.17





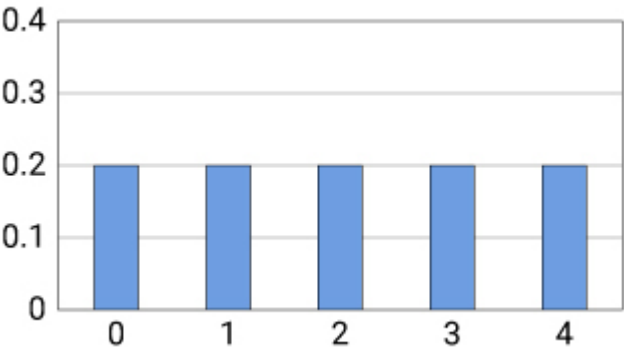
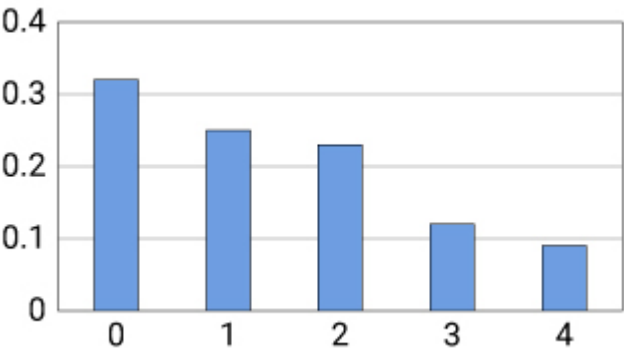
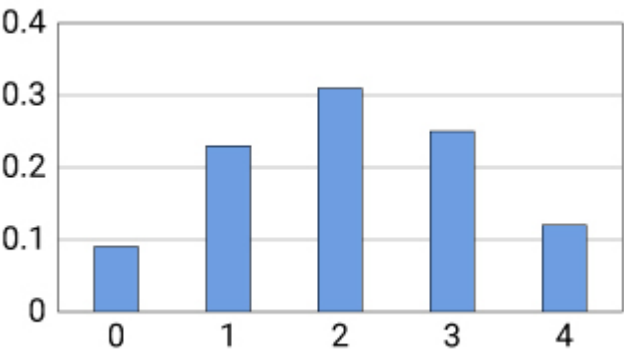
QUESTION 26

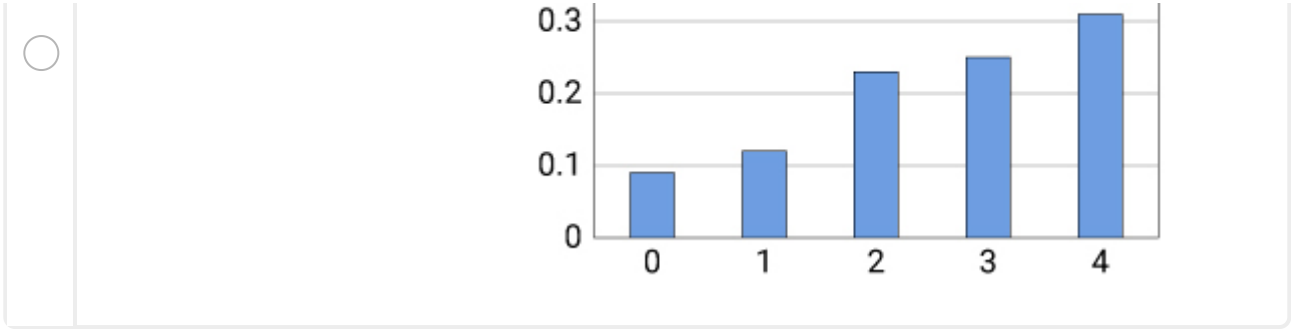


Choose the correct answer.

Which graph represents the experimental probability distribution represented in this relative frequency table?

Number of Heads	0	1	2	3	4
Relative Frequency	0.09	0.23	0.31	0.25	0.12





QUESTION 27

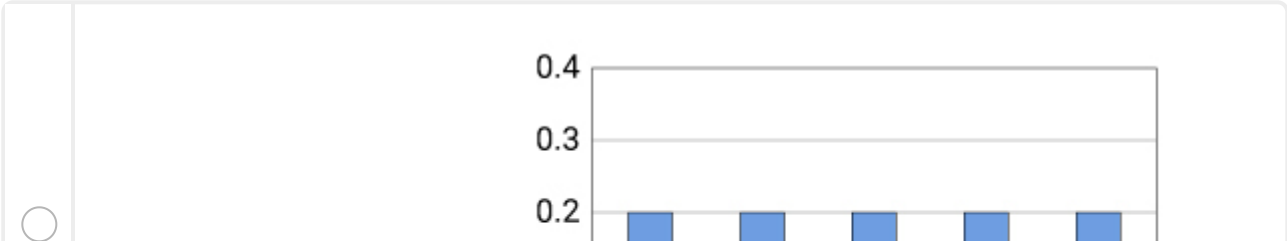
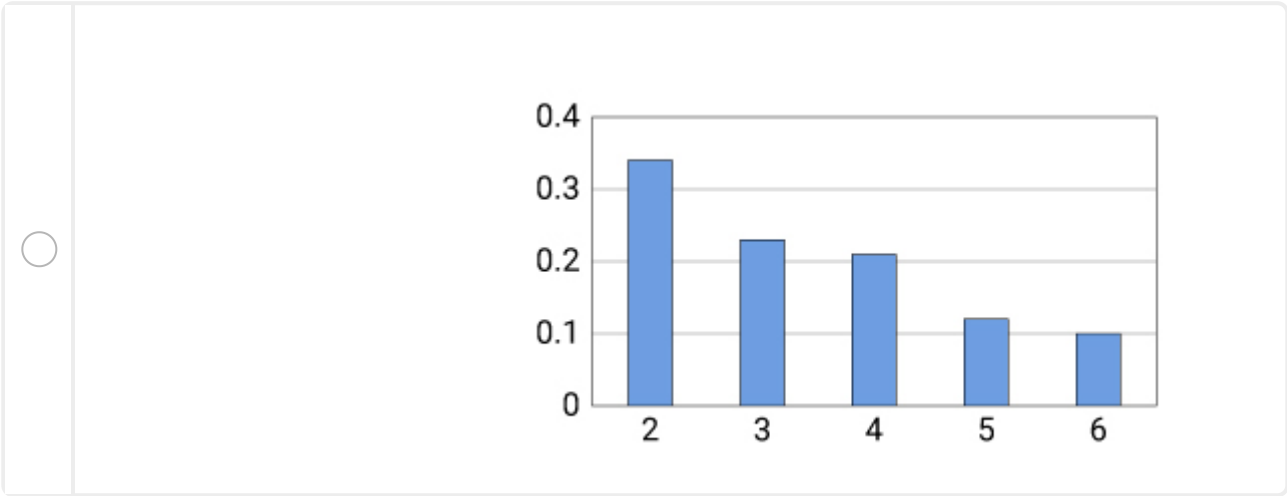
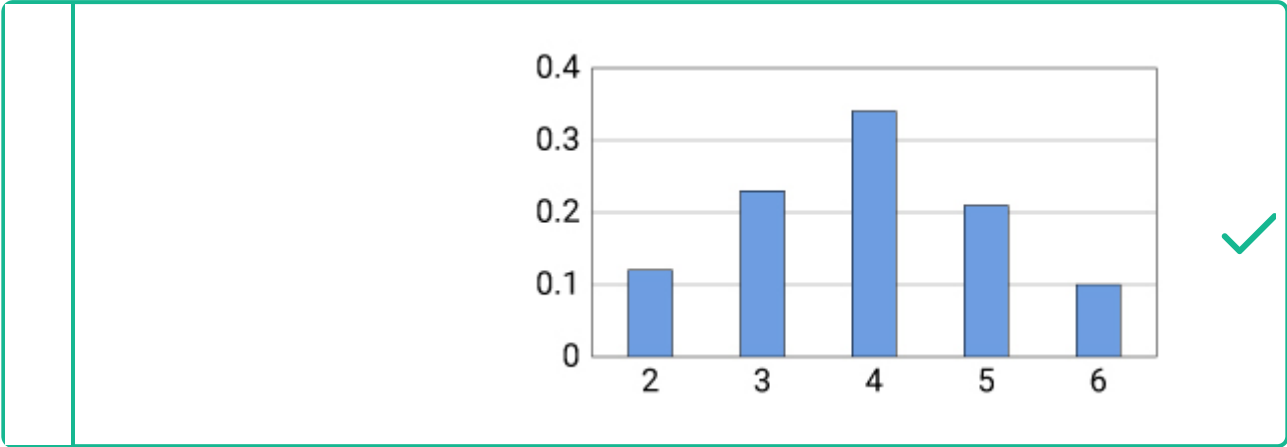
Choose the correct answer.

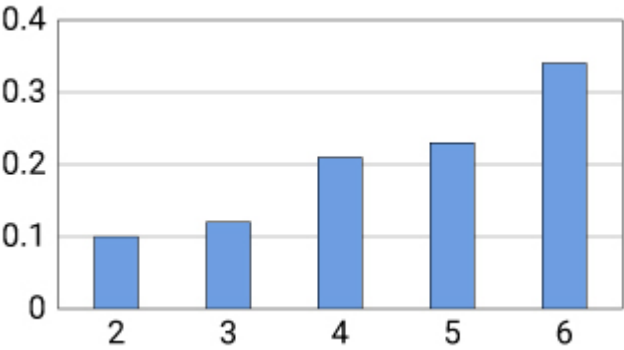
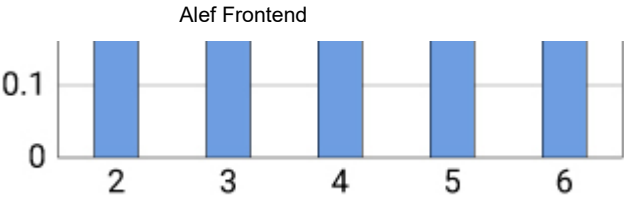
Use the tally table to graph the experimental probability distribution.

Sum	Tally	Frequency
2		12
3		23
4		34

https://moe.alefed.com/teacher/?1665987996613#/lessons/lesson/dd1627f8-6c4b-48ec-83ef-000000037470/content/a2f7d906-c57e-47fe-99eb-eeb... 37/46

5		21
6		10





QUESTION 28

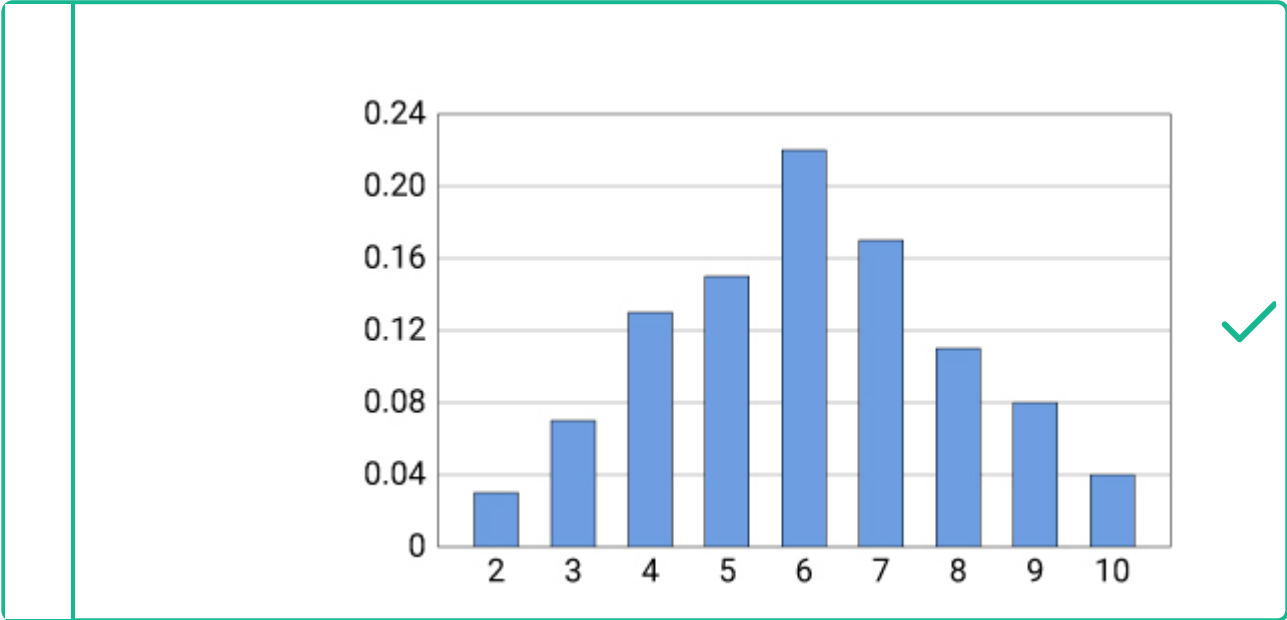


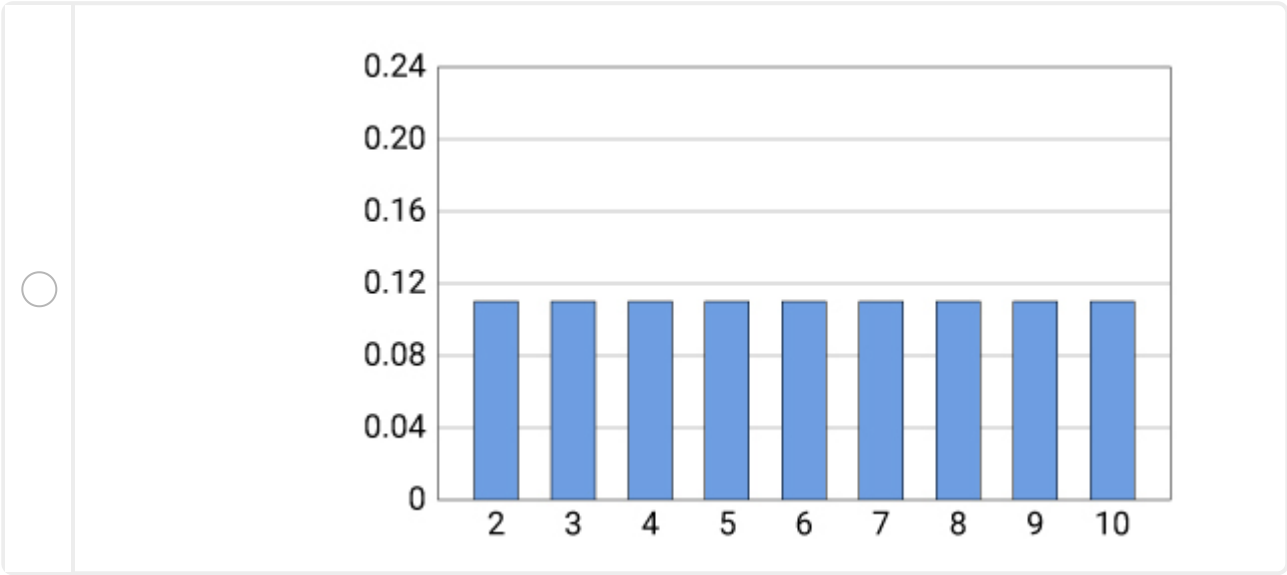
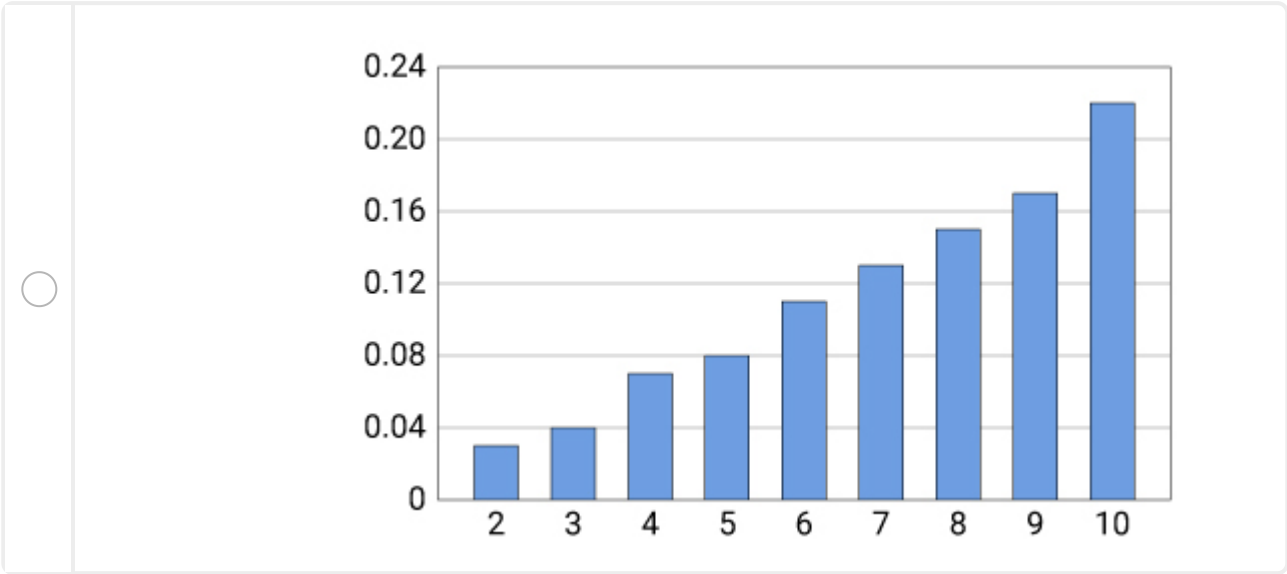
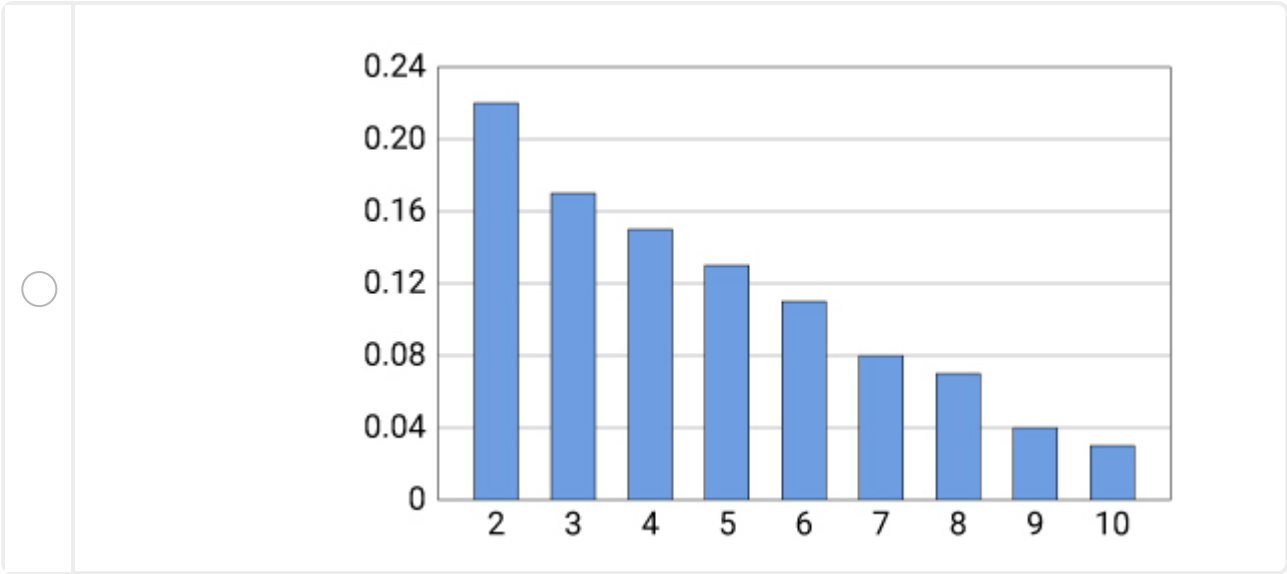
Choose the correct answer.

Use the tally table to graph the experimental probability distribution.

Sum	Tally	Frequency
2		3
3	 	7
4	 	13
5		15

6		22
7		17
8		11
9		8
10		4





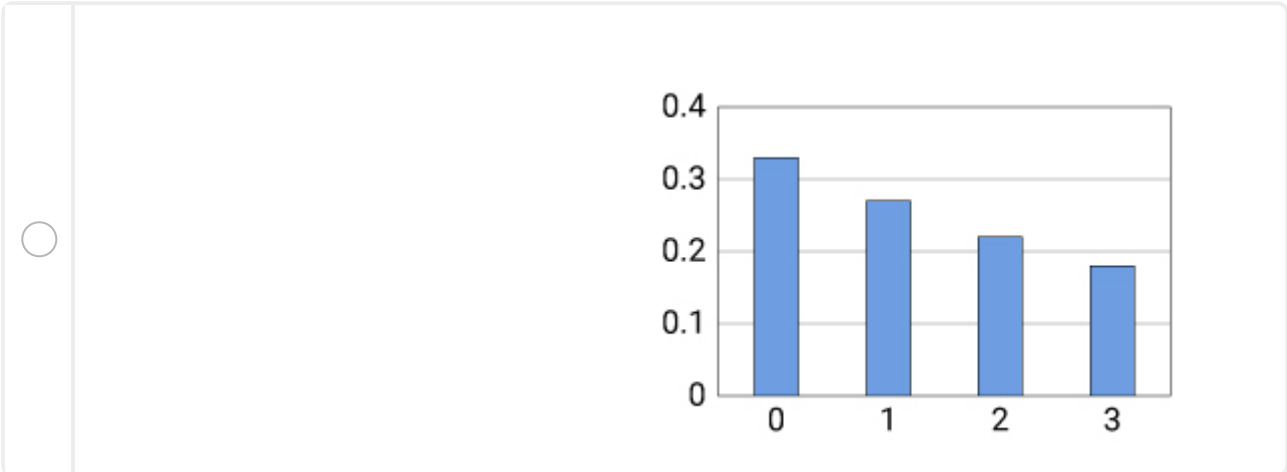
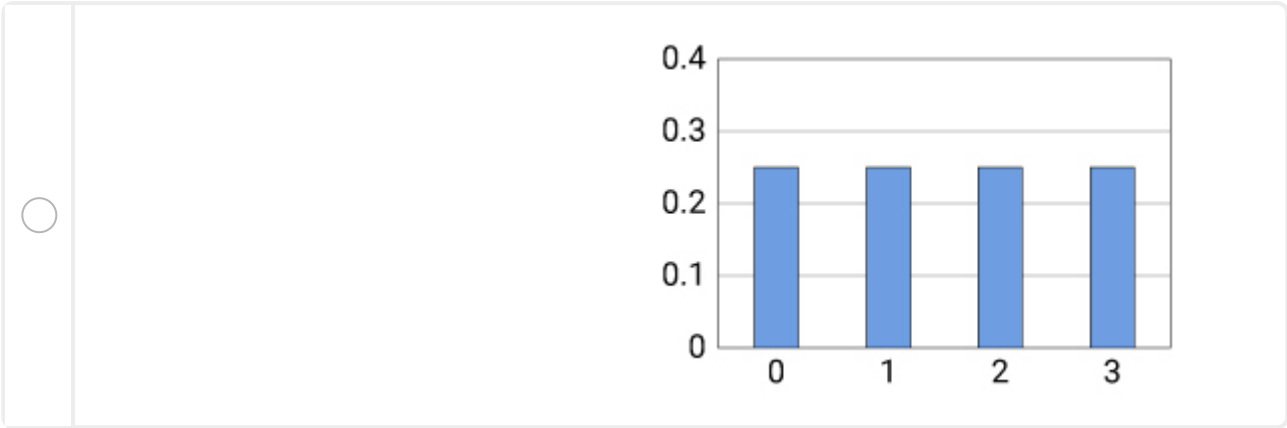
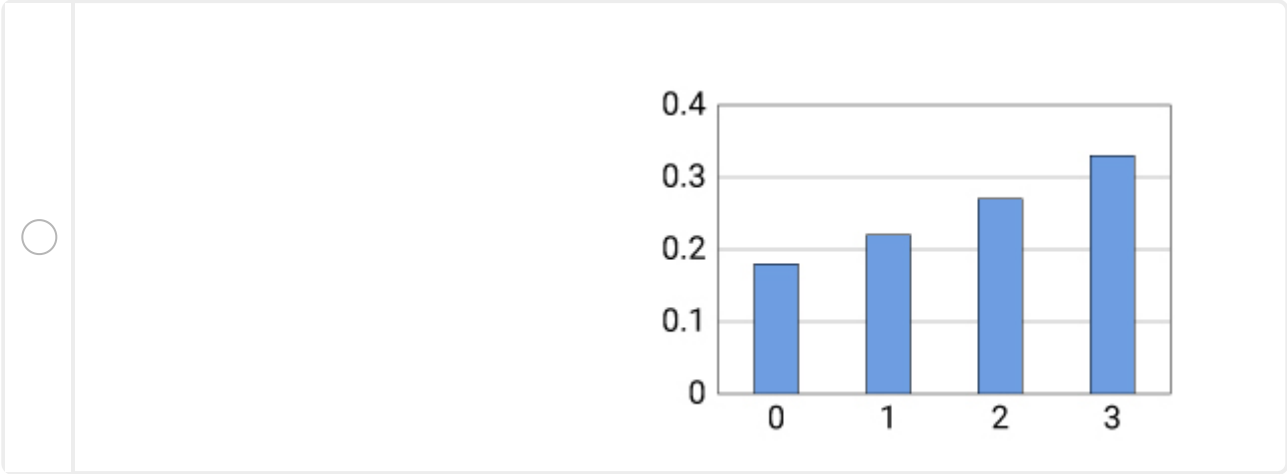
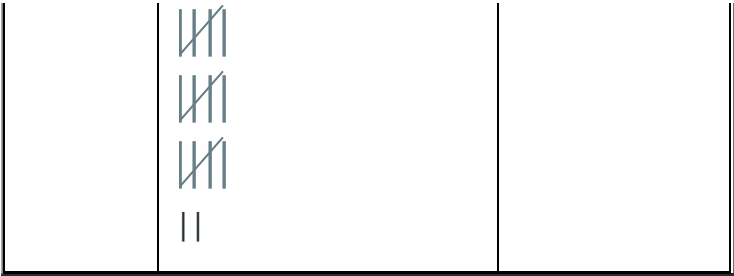
QUESTION 29

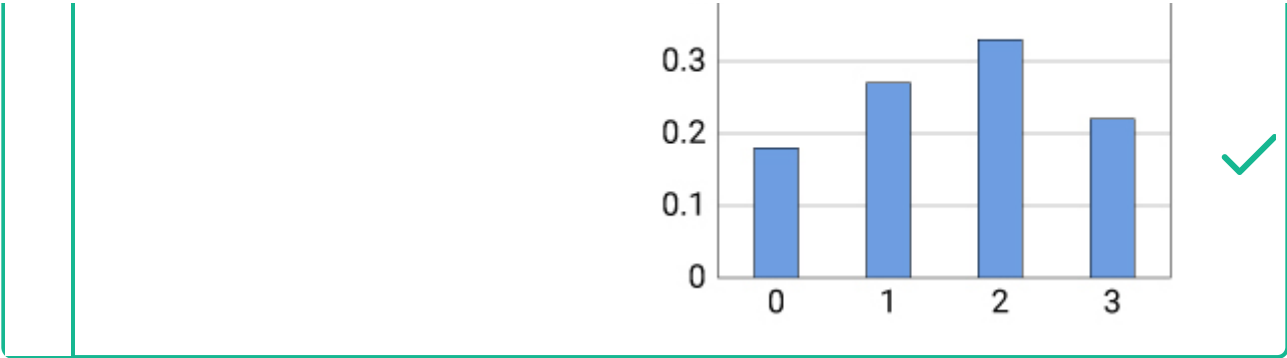


Choose the correct answer.

Use the tally table to graph the experimental probability distribution.

Number of Heads	Tally	Frequency
0		18
1		27
2		33
3		22





QUESTION 30



Choose the correct answer.

Use the tally table to graph the experimental probability distribution.

Number of Heads	Tally	Frequency
0		7
1		24
2		32

	 	
3	 	28
4	 	9

