8.3 Puzzle Time

What Do You Call A Pig That Does Karate?

Write the letter of each answer in the box containing the exercise number.

Find the probability.

1. A bowl contains three grapefruits and four oranges. You randomly select a piece of fruit, eat it, and then randomly select another piece of fruit. Find the probability that you select an orange second given that you selected a grapefruit first.

2. You have five mystery novels and two science fiction novels. You randomly select two different novels to read. Find the probability that you select a mystery novel to read second given that you randomly selected a science fiction novel to read first.
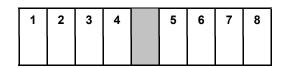
A company surveys cyclists about bicycle designs. The two-way table shows the joint relative frequencies. Find the probability.

		Like	Dislike	No Opinion
Design	**A**	0.326	0.023	0.112
	B	0.279	0.102	0.158

3. $P(\text{like} \mid \text{Design } A)$
4. $P(\text{no option} \mid \text{Design } B)$
5. $P(\text{Design } A \mid \text{dislike})$
6. $P(\text{Design } B \mid \text{like})$

At a restaurant, 92% of the customers order an entrée, 28% order an entrée and a soup, and 36% order an entrée and a dessert.

7. What is the probability that a customer who orders an entrée also orders a dessert?

8. What is the probability that a customer who orders an entrée also orders a soup?

Answers

H. 0.461

P. about 30%

R. 0.707

O. about 39%

O. about 83%

C. 0.184

K. 0.293

P. about 67%

1	2	3	4		5	6	7	8