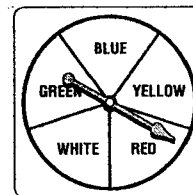
**14-4****Practice****Probability Distributions**

SHOW WORK
NO WORK = NO CREDIT

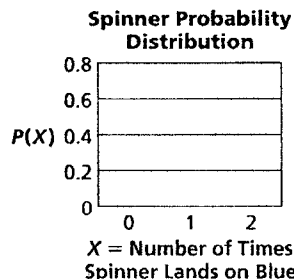
For Exercises 1–3, the spinner shown is spun two times.

1. Write the sample space with all possible outcomes.

2. Find the probability distribution X , where X represents the number of times the spinner lands on blue for $X = 0$, $X = 1$, and $X = 2$.



3. Make a probability histogram.



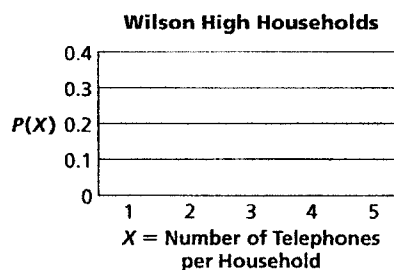
TELECOMMUNICATIONS For Exercises 4–6, use the table that shows the probability distribution of the number of telephones per student's household at Wilson High.

X = Number of Telephones	1	2	3	4	5+
Probability	0.01	0.16	0.34	0.39	0.10

4. Show that this is a valid probability distribution.

5. If a student is chosen at random, what is the probability that there are more than 3 telephones at the student's home?

6. Make a probability histogram.



LANDSCAPING For Exercises 7–9, use the table that shows the probability distribution of the number of shrubs (rounded to the nearest 50) ordered by corporate clients of a landscaping company over the past five years.

Number of Shrubs	50	100	150	200	250
Probability	0.11	0.24	0.45	0.16	0.04

7. Define a random variable and list its values.

8. Show that this is a valid probability distribution.

9. What is the probability that a client's (rounded) order was at least 150 shrubs?