Grade 6 - Chapter 13 - Probability - Lesson 2

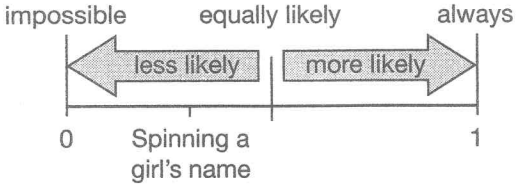
Answers

A. For example,

Spin	Results
girl	|||
boy	𝍸 ||

B. For example, unlikely

C. For example,



D. For example, $\frac{3}{10} = \frac{30}{100}$

E. For example, 30%

F. For example,

Spin	Experiment 1	Experiment 2	Combined Results
girl	|||	𝍸	8
boy	𝍸 ||	𝍸	12

Probability of spinning a girl's name: unlikely; $\frac{8}{20} = \frac{40}{100}$; 40%

G. 40%

1. For example, because $\frac{7}{20}$ of the spinner is girls' names, which is $\frac{35}{100}$, which is more than $\frac{25}{100} = \frac{1}{4}$ but less than $\frac{1}{2} = \frac{50}{100} = 50\%$.

2. a) 0% **b)** 50% **c)** For example, 90%

3. For example, because it can be hard to compare two fractions, such as $\frac{3}{16}$ and $\frac{4}{22}$, which you might get if one experiment were done 16 times and another were done 22 times, but it's easy to compare any two percents.

4. For example, likely, $\frac{12}{20} = \frac{6}{10}$; 60%

5. For example,

Results of 20 Rolls				
5	2	2	1	3
4	6	1	2	5
2	4	6	5	1
4	1	3	6	3

a) For example, probability of rolling 5 $= \frac{3}{20} = \frac{15}{50} = 15\%$

b) For example, probability of rolling an even number $= \frac{10}{20} = \frac{50}{100} = 50\%$

c) For example, probability of rolling a 4, 5, or 6 $= \frac{11}{20} = \frac{55}{100} = 55\%$

d) For example, probability of rolling a 10 $= \frac{0}{20} = 0\%$

Lesson 2 Answers (continued from p. 19)

6. a) 30 times **b)** 15 times **c)** 3 times **d)** For example, about 7 times

7. For example,

20 Rolls of a Die																			
5	1	4	5	4	1	3	6	6	3	2	1	6	5	3	5	4	3	3	4

a) For example, I predicted 90%, since 5 out of 6 possibilities, and that's most of them, are less than 6; when I rolled, I got 17 numbers less than 6, so that's $\frac{17}{20} = \frac{85}{100} = 85\%$.

b) For example, I predicted 10%, since only 1 out of 6 possibilities is 2 and that's a lot less than $\frac{1}{2}$ or 50%; when I rolled, I only got one 2, so my probability was $\frac{1}{20} = \frac{5}{100} = 5\%$.

c) For example, I predicted 50%, since there are two possibilities (5 and 6) out of 6 possibilities; it's less than half but closer to half than to $\frac{1}{10}$ or $\frac{9}{10}$; when I rolled, I got 7 out of 20 that were greater than 4, so the percent was $\frac{7}{20} = \frac{35}{100} = 35\%$.

8. 50%, For example, because 50% means half and that's fair.

9. For example, I predicted that when rolling a die, the number would be less than 3 about 30% of the time. I rolled 20 times and got 1 or 2 six times; $\frac{6}{20} = \frac{30}{100} = 30\%$.