1. $\frac{1}{6}$
2. $\frac{2}{6}$, or $\frac{1}{3}$
3. $\frac{3}{6}$, or $\frac{1}{2}$
4. $\frac{3}{6}$, or $\frac{1}{2}$
5. $\frac{2}{6}$, or $\frac{1}{3}$
6. $\frac{3}{6}$, or $\frac{1}{2}$
7. $\frac{3}{8}$
8. $\frac{1}{8}$
9. $\frac{2}{8}$, or $\frac{1}{4}$
10. $\frac{2}{8}$, or $\frac{1}{4}$
11. $\frac{3}{8}$
12. $\frac{5}{8}$
13. a. $\frac{2}{3}$
b. not choosing green
14. 2 to 3; 3 to 2
15. 0
20.021
16. $\frac{7}{11}$
17. 1 to $1 ; 1$ to 1
18. 1 to 2; 2 to 1
19. 2 to $1 ; 1$ to 2
20. 1 to 3; 3 to 1
21. 3 to $2 ; 2$ to 3
22. $\frac{2}{6}$, or $\frac{1}{3}$
23. $\frac{6}{11}$
24. $\frac{3}{14}$
25. 4 to 5; 5 to 4
26. 11 to 25; 25 to 11
27. 1 to 5; 5 to 1
28. 3 to 1; 1 to 3
29. Answers may vary. Sample: Getting a number less than 7 on one roll of a number cube; all the numbers on a number cube are less than 7.
30. The friend found odds rather than probability.
31. Answers may vary. Sample: If the odds in favor of an event are $a b$, then the probability of the event is $\frac{a}{a+b}$. Example: The odds in favor of a number less than 6 on a number cube are 5 to 1 . The probability is $\frac{5}{5+1}$, or $\frac{5}{6}$.
