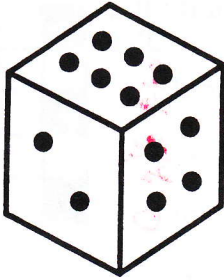


Probability

Skill: probability

Name KEY

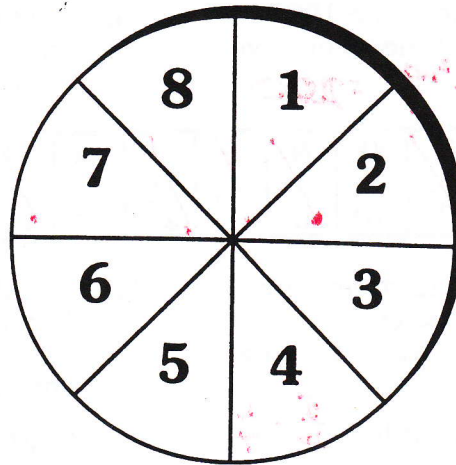
Find the probability for the die.



1. P(4) $\frac{1}{6}$
2. P(odd number) $\frac{3}{6} = \frac{1}{2}$
3. P(1 or 5) $\frac{2}{6} = \frac{1}{3}$
4. P(multiple of 2) $\frac{3}{6} = \frac{1}{2}$
5. P(prime number) $\frac{3}{6} = \frac{1}{2}$
6. P(factor of 120) 1
7. P(8) 0
8. P(number < 5) $\frac{4}{6} = \frac{2}{3}$

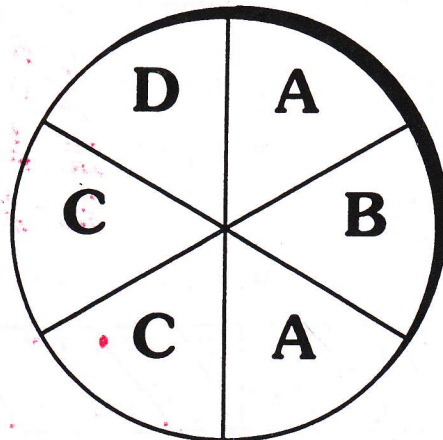
Find the probability for the spinner.

9. P(7) $\frac{1}{8}$
10. P(2 or 3) $\frac{2}{8} = \frac{1}{4}$
11. P(even number) $\frac{4}{8} = \frac{1}{2}$
12. P(number > 2) $\frac{6}{8} = \frac{3}{4}$
13. P(multiple of 2) $\frac{4}{8} = \frac{1}{2}$
14. P(factor of 280) $\frac{5}{8}$
15. P(odd number) $\frac{4}{8} = \frac{1}{2}$
16. P(number < 5) $\frac{4}{8} = \frac{1}{2}$
17. P(factor of 60) $\frac{6}{8} = \frac{3}{4}$
18. P(not 5) $\frac{7}{8}$



Find the probability for the spinner.

19. P(A) $\frac{2}{6} = \frac{1}{3}$
20. P(C) $\frac{2}{6} = \frac{1}{3}$
21. P(B or D) $\frac{2}{6} = \frac{1}{3}$
22. P(A or B) $\frac{3}{6} = \frac{1}{2}$
23. P(not D) $\frac{5}{6}$
24. P(B) $\frac{1}{6}$
25. P(C or A) $\frac{4}{6} = \frac{2}{3}$
26. P(D or A) $\frac{3}{6} = \frac{1}{2}$
27. P(D) $\frac{1}{6}$
28. P(B or C) $\frac{3}{6} = \frac{1}{2}$



Which Italian Insects Often Fall in Love?

ROMAN TICKETS

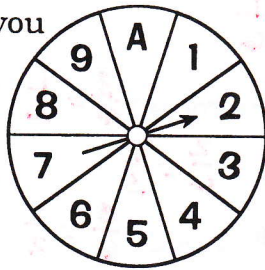
Find each correct answer in the set of answers under the exercise and cross out the letter above it.



1. Each time you spin this spinner, how many equally likely outcomes are there? **10**

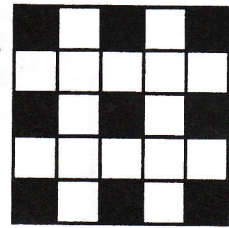
5. If a raindrop falls on this set of tiles, how many equally likely outcomes are there? **25**

2. Find each probability if you spin the spinner once.



- a. P(even number) $\frac{4}{10} = \frac{2}{5}$
- b. P(odd number) $\frac{5}{10} = \frac{1}{2}$
- c. P("A") $\frac{1}{10}$

6. Find each probability if a raindrop falls on the tiles.



- a. P(falling on black) $\frac{12}{25}$
- b. P(falling on white) $\frac{13}{25}$
- c. P(falling on green) 0

3. If you spin the spinner 100 times, about how many times would you expect it to stop on:

7. If 100 raindrops fall on the tiles, about how many of them would you expect to fall on:

- a. an even number **40**
- b. an odd number **50**

- a. a black tile $\frac{12}{25} \cdot 100 = 48$
- b. a white tile $\frac{13}{25} \cdot 100 = 52$

4. If you roll a regular 6-faced die 1200 times, about how many times would you expect to get a 4? $\frac{1}{6} \cdot 1200 = 200$

8. Jack rolled a regular 6-faced die three times and got 2 each time. What is the probability he will get 2 on the next roll? $\frac{1}{6}$

K	I	T	R	A	L	O	N	E	O	M	D	E	S	R	A	S	N	T
200	$\frac{1}{2}$	64	$\frac{1}{3}$	$\frac{16}{25}$	50	$\frac{7}{10}$	$\frac{1}{6}$	10	$\frac{9}{25}$	60	$\frac{1}{10}$	0	25	$\frac{2}{5}$	24	36	$\frac{3}{8}$	40

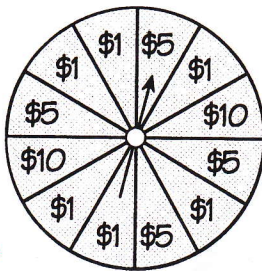
9. Suppose a bag contains 12 green cubes, 5 blue cubes, and 3 yellow cubes. Find each probability if you choose one cube at random:

12. A traffic signal is green for 20 seconds, then amber for 5 seconds, then red for 30 seconds. When you reach the signal, what is the probability it is:

- a. P(green) $\frac{12}{20} = \frac{3}{5}$
- b. P(blue) $\frac{5}{20} = \frac{1}{4}$
- c. P(yellow) $\frac{3}{20}$
- d. P(not blue) $\frac{15}{20} = \frac{3}{4}$

- a. green $\frac{20}{55} = \frac{4}{11}$
- b. amber $\frac{5}{55} = \frac{1}{11}$

10. If you spin this spinner 600 times, about how many times would you expect it to stop on:



- a. \$1 $\frac{3}{10} \cdot 600 = 180$
- b. \$5 $\frac{3}{10} \cdot 600 = 180$
- c. \$10 $\frac{4}{10} \cdot 600 = 240$

11. Jill tossed a coin 10 times and got heads every time. What is the probability she will get heads on the next toss? $\frac{1}{2}$

13. Suppose you do a survey to find the blood types of 200 people and obtain the results in the table. Based on this data, find the probability that a randomly chosen person has:

Blood Type	Number of People
O ⁺	76
O ⁻	14
A ⁺	68
A ⁻	12
B ⁺	18
B ⁻	4
AB ⁺	6
AB ⁻	2

- a. Type O⁺ $\frac{76}{200} = \frac{19}{50}$
- b. Type A⁻ $\frac{12}{200} = \frac{3}{50}$
- c. Type B⁻ $\frac{4}{200} = \frac{1}{50}$
- d. Type AB⁺ or AB⁻ $\frac{8}{200} = \frac{1}{25}$

B	S	T	O	H	U	G	I	V	P	C	E	N	T	E	K	I	S	S
$\frac{3}{20}$	$\frac{19}{50}$	$\frac{7}{20}$	$\frac{1}{50}$	$\frac{3}{4}$	$\frac{1}{2}$	200	$\frac{3}{11}$	$\frac{3}{5}$	$\frac{1}{25}$	120	$\frac{1}{11}$	300	100	$\frac{1}{4}$	$\frac{3}{10}$	$\frac{4}{11}$	$\frac{3}{50}$	$\frac{1}{3}$