10. A natural number from 1 to 10 is randomly chosen.

a. P(even or 7)

- b. P(even or odd)
- c. P(multiple of 2 or multiple of 3)
- **d.** P(odd or less than 3)

11. A standard number cube is tossed.

a. P(even or 3)

**b.** P(less than 2 or even)

c. P(prime or 4)

d. P(2 or greater than 6)

12. Only 93% of the airplane parts Salome is examining pass inspection. What is the probability that all of the next five parts pass inspection?

13. There is a 50% chance of thunderstorms the next three days. What is the probability that there will be thunderstorms each of the next three days?

Q and R are independent events. Find P(Q and R).

**14.** 
$$P(Q) = \frac{1}{8}, P(R) = \frac{2}{5}$$
 **15.**  $P(Q) = 0.8, P(R) = 0.2$  **16.**  $P(Q) = \frac{1}{4}, P(R) = \frac{1}{5}$ 

**15.** 
$$P(Q) = 0.8, P(R) = 0.2$$

**16.** 
$$P(Q) = \frac{1}{4}, P(R) = \frac{1}{5}$$

M and N are mutually exclusive events. Find P(M or N). 17.  $P(M) = \frac{3}{4}$ ,  $P(N) = \frac{1}{6}$  18. P(M) = 10%, P(N) = 45% 19.  $P(M) = \frac{1}{5}$ , P(N) = 18%

17. 
$$P(M) = \frac{3}{4}, P(N) = \frac{1}{6}$$

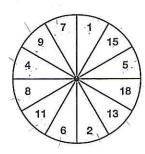
**18.** 
$$P(M) = 10\%, P(N) = 45\%$$

**19.** 
$$P(M) = \frac{1}{5}, P(N) = 18\%$$

## Exercises

Use the spinner at the right to determine the theoretical probability for each event.

- 1. P(the number is even)
- 2. P(5)
- 3. P(the number is prime)
- 4. P(the number is less than 6)
- 5. P(an odd number)
- 6. P(a number divisible by 2)
- 7. P(a multiple of 3)
- 8. P(an 11 or 15)
- 9. P(a composite number)
- **10.** P(the number represents your age)
- 11. P(a perfect square)
- 12. P(the number represents your grade)
- **13.** P(not a 5 or 7)



12.