

13-6 Practice

Probabilities of Mutually Exclusive Events

Determine whether the events are *mutually exclusive* or *not mutually exclusive*. Then find the probability. Round to the nearest hundredth.

1. drawing a card from a standard deck and choosing a 7 or a 10
mutually exclusive, 0.15
2. rolling a pair of dice and getting a sum of either 6 or 8
mutually exclusive, 0.28
3. selecting a number from a list of integers 1 to 20 and getting a prime or even number
not mutually exclusive, 0.85
4. drawing a card from a standard deck and getting a queen or a heart
not mutually exclusive, 0.31

Determine the probability of each event. Round to the nearest hundredth.

5. What is the probability of drawing a card from a standard deck and not choosing an ace?
0.92
6. What is the probability of rolling a pair of dice and not rolling the same number?
0.83
7. If the chance of being chosen for the principal's task force is 3 in 20, what is the probability of not being chosen?
0.85
8. What is the probability of spinning a spinner with 12 equally sized sections numbered from 1 to 12 and not landing on 6?
0.92
9. **TRAFFIC** If the chance of making a green light at a certain intersection is 35%, what is the probability of arriving when the light is yellow or red?
0.65
10. **RAFFLE** Michael bought 50 raffle tickets. If 1000 were sold, what is the probability that one of Michael's tickets will not win?
0.95