

Probability/Statistics
Worksheet 4.1-4.2 C

NAME _____

Two die are rolled at the same time.

1. List the remaining combinations.

1, 1; 1, 2; 1, 3;

2. What is the probability that at least one of the die has a 2?

3. What is the probability that the sum will equal 6?

4. What is the probability that the second die will be a 5?

5. What is the probability the dice will have the same value?

Using a standard deck of playing cards, find each if the card from the 1st draw has been REPLACED.

6. P(0 and 5)

7. P(8 and dia)

8. P(7 and 7)

8. Are these events dependent or independent?

Using a standard deck of playing cards, find each if the card from the 1st draw has NOT BEEN REPLACED.

9. P(4 and j)

10. P(club and club)

11. P(spade and 8)

12. Are these events dependent or independent?

Answer each probability.

13. Is it possible for $P(A) = .78$?
14. Is it possible for $P(A) = 17/16$?
15. Is it possible for $P(A) = 104\%$?
16. If $P(A) = .54$, what is the value of $P(\text{not } A)$?
17. If $P(\text{not } A) = .72$, what is the value of $P(A)$?

Suppose a sample space has 5 equally likely outcomes A, B, C, D, and E all of which are mutually exclusive.

18. What is the value of $P(E)$?
19. What is the value of $P(B \text{ or } C)$?
20. What is the value of $P(\text{not } D)$?
21. What is the value of $P(A \text{ or } B \text{ or } C \text{ or } D)$?

You roll two fair dice.

22. What is the probability of getting a number greater than 1 on both?
23. What is the probability of getting a sum of 6 on the two dice?
24. What is the probability of getting two on both?

You draw two cards from a standard deck and do not replace the first card before you draw the second.

25. What is the probability that the first card is the three of diamonds and the second is the jack of hearts?
26. What is the probability that the first card is the five of diamonds and the second card is a diamond?
27. What is the probability that the first card is not a 10 and the second card is also not a 10?