

PROBABILITY & ODDS

Act. #85

Susie has a spinner that has four sectors. One is yellow, one is orange, one is blue and one is red. Calculate the following:

1. What is the probability of spinning a yellow? 1. _____
2. What is the probability of not spinning a yellow? 2. _____
3. What are the odds in favor of spinning a yellow? 3. _____
4. What are the odds against spinning a yellow? 4. _____

Sammy has a number cube (dice). Calculate the following:

5. What is the probability of rolling a 6? 5. _____
6. What is the probability of not rolling a 6? 6. _____
7. What are the odds in favor of rolling a 6? 7. _____
8. What are the odds against rolling a 6? 8. _____
9. What is the probability of rolling an even number? 9. _____
10. What is the probability of not rolling an even number? 10. _____
11. What are the odds in favor of rolling an even number? 11. _____
12. What are the odds against rolling an even number? 12. _____

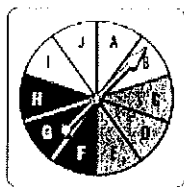
A sweepstakes has 500 entries. You have purchased one ticket. Calculate the following:

13. What is the probability that you will win the sweepstakes? 13. _____
14. What is the probability that you will not win the sweepstakes? 14. _____
15. What are the odds in favor of you winning the sweepstakes? 15. _____
16. What are the odds against you winning the sweepstakes? 16. _____

17. A bag contains 6 red marbles, 3 blue marbles and 1 yellow marble. Find the odds of choosing a red marble.

18. A coin is randomly removed from a change jar that contains 7 pennies, 8 nickels, and 5 quarters. What are the odds that the coin chosen is a nickel?

Directions: Find the **probability** of each outcome if the spinner below is spun.



19. white

20. "C"

21. a vowel (A, E, I, O, U)

22. gray

23. black or gray

24. a consonant

25. not gray

26. not a vowel or consonant

Directions: Find the **odds** of each outcome if the spinner above is spun.

27. "D"

28. gray

29. a vowel

30. not black

31. "G" or "B"

32. white or black

33. "F" or gray

34. A letter of the alphabet

The number of males and females enrolled in Blue Dolphin High School are listed per class in the table below. Use this table to answer questions 20 through 23.

35) If a student is chosen at random, what is the probability that the student is a female?

36) If a student is chosen at random, what is the probability that the student is a male in Grade 11?

Blue Dolphin High School		
Grade	Male	Female
9	120	150
10	100	100
11	130	110
12	150	175

37) If one student is chosen to represent the student body, what are the odds in favor of selecting a female?

38) If one student is chosen from Grade 12, which is more likely, selecting a male or selecting a female?

A card is selected at random from a deck of 52 cards.

39) What are the odds in favor of selecting a heart?

40) What is the probability of selecting an ace?

How many different ways can the letters in the following words be re-arranged?

41) algebra

42) Mississippi

43) bumfuzzled