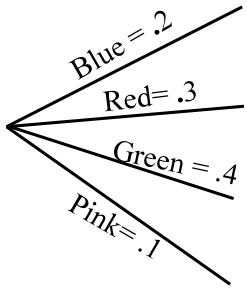
Probability Trees

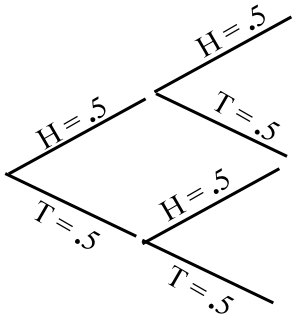
The probability of landing on a specific color on a spinner is listed on the probability tree. Calculate each probability as a decimal and a percentage.



1) P(G) =
2) P(R) =
3) P(B) =
4) P(B or R) =
5) P(R or G) =
6) P(B or R or G) =
7) P(G or P) =
8) P(B or P) =
9) P(P) =
10) P(B or R or G or P) =
11) #5 + #8 =
12) 1 - #6 =

Madison flips a coin twice. The probabilities for each flip are listed on the tree. Calculate each probability as a decimal and a percentage.

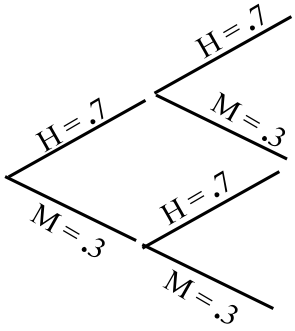
H = heads, T = tails



13) P(1st flip heads) =
14) P(1st flip tails) =
15) P(HH or HT or TH) =
16) P(HH) =
17) P(TH) =
18) P(TT) =
19) P(HT) =
20) P(TH or TT) =
21) # 15 + #18 =
22) P(HH or HT) =
23) P(HH or HT or TH or TT) =
24) 1 - P(HH or HT) =

Randy is a 70% free throw shooter. He is shooting two free throws. Calculate each probability as a decimal and a percentage.

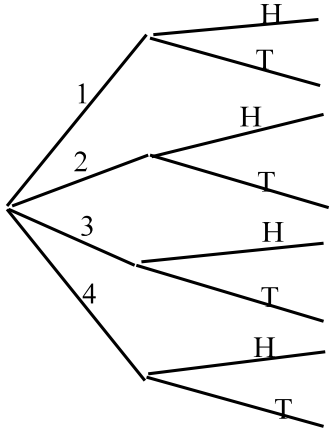
H = hit, M = miss



25) P(hits 1st shot)=
26) P(misses 1st shot)=
27) P(HH or MM)=
28) P(MH)=
29) P(HM)=
30) 1- P(HH or MM)=
31) P(MM)=
32) P(HH or HM)=
33) # 15 + #18=
34) 1 - P(MH or MM)=
35) P(HH or HM or MH or MM) =
36) 1 - P(HH or HT)=

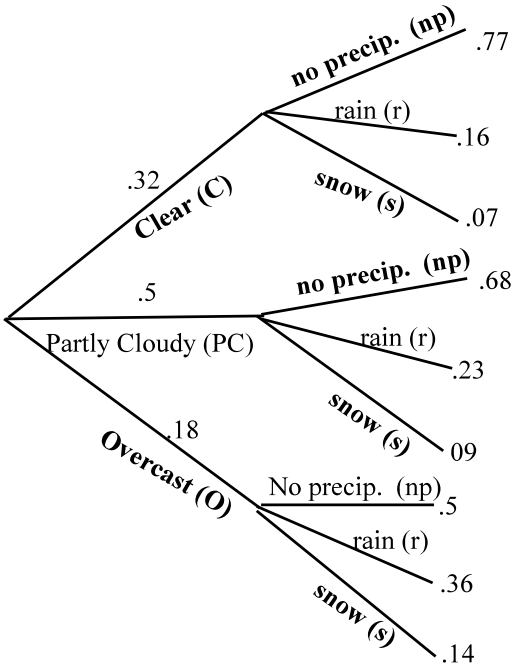
Paul rolls an odd-shaped, 4 sided die and then flips a coin. Calculate the probability of each outcome as a decimal and a percentage.

Key:
P(1) = .34
P(2) = .08
P(3) = .2
P(4) = .38
P(H) = .5
P(T) = .5



37) P(1 or 2)
38) P(1H)
39) P(1H) =
+ P(1T) =
+ P(2H) =
+ P(2T) =
+ P(3H) =
+ P(3T) =
+ P(4H) =
+ P(4T) =
=
40) P(3 or 4)
41) P(1T)
42) 1 - P(1 or 2)
43) P(1H or 1T)
44) How do 40 and 43 compare? Why
45) 1 - P(1H or 1T)
46) P(1 or 2 or 3 or 4) =
47) P(2H or 3H)
48) 1 - P(2H or 3H)

The first branch of the probability tree below gives the probability that a day will begin clear, partly cloudy, or overcast in Weather City. The second branch gives the probabilies of different precipitation outcomes.



Give the following probabilities.

49) P (C) =

50) P (PC) =

51) P (O or PC) =

52) P (C or PC) =

53)P (C or O) =

54) P (O and r) =

55) P (PC and r) =

56) P (C and s) =

57) P (C and np) =

58) P (PC and np) =

59) P (O and np)) =

60) P (C or PC or O) =

61) P (O and np OR O and r) =

62) P (C and r OR C and s) =

63) P (PC and np OR PC and r) =

64) P (C and s OR PC and np) =

65) P (PC and r OR C and r) =

66) P (C and np OR PC and np OR O and np) =

67) P (C and np OR C and r OR C and s) =

68) P (C and s OR PC and s OR O and s) =

69) P (O and np OR O and r OR O and s) =

70) P (C and np OR C and r OR C and s OR PC and np OR PC and r OR PC and s OR O and np OR O and r OR O and s) =