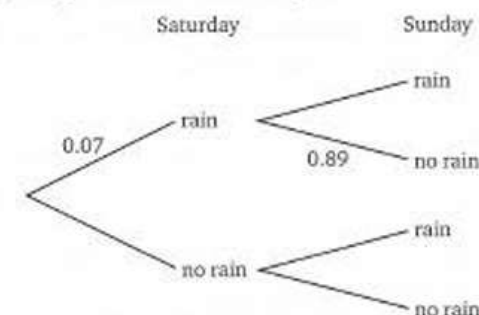


Homework

- 7** In a youth club, 35 teenagers said that they went to football matches, discos or both. Of the 22 who said they went to football matches, 12 said they also went to discos. A further 10 teenagers said they did not go to either. Show this information on a Venn diagram.
- How many teenagers went to football matches or discos, but not to both?
 - One of this group of teenagers is chosen at random. What is the probability that the teenager went to discos but not to football matches?
- 8** There are 28 students in a class, all of whom take history or geography or both. 14 take history, 5 of whom also take geography.
- Show this information on a Venn diagram.
One student is chosen at random. What is the probability that the student takes
 - geography
 - history but not geography
 - just one of these subjects?

- 11** The weather forecast gives the probability that it will rain on Saturday as 0.07 and the probability that it will not rain on Sunday as 0.89.
- On which of these two days is it more likely to rain and why?
 - Copy and, complete this tree diagram.



- Use your tree diagram to find the probability that it will rain on
 - both days
 - just one of the days.
- The probability that it will rain on Monday is 0.3. Add more branches to your tree diagram to include Monday.
- Use your new tree to find the probability that it will rain on
 - none of the three days
 - at least one of the three days.