



Mathematics lesson 5 – Answer sheet

Mathematics lesson 5 – Answer sheet (higher)

Question 1 solution:

The probability that an employee is happy at work is 0.7.

Question 2 solution:

The probability diagram is the worked example on the PowerPoint.

Question 3 solution:

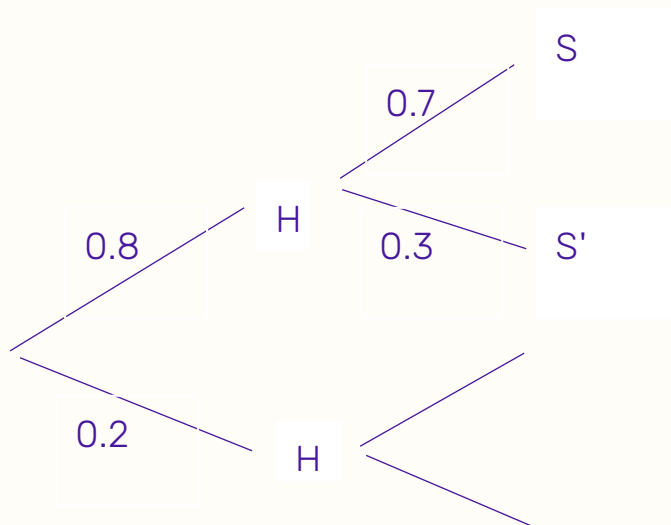
Using the probability tree diagram from question 2, the probability that an employee is happy at work due to job satisfaction is 0.28.

Question 4 solution: Using the probability tree diagram from question 2, the probability that an employee is unhappy at work is 0.3.

Question 5 solution:

If 40% of employees are unhappy at work because of a heavy workload, then the probability that an employee is unhappy at work due to reasons other than a heavy workload is 0.6.

Question 6 solution:



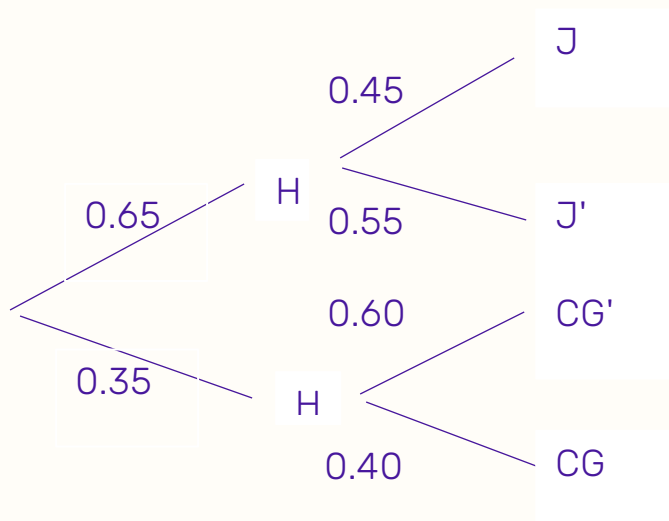
Question 7 solution:

Using the probability tree diagram from question 6, the probability that an employee is happy at work due to supportive management is 0.56.

Question 8 solution:

Using the probability tree diagram from question 6, the probability that an employee is unhappy at work is 0.2.

Question 9 solution:



Question 10 solution:

Using the probability tree diagram from question 9, the probability that an employee is unhappy at work due to a lack of career growth is 0.21.

Question 11 solution:

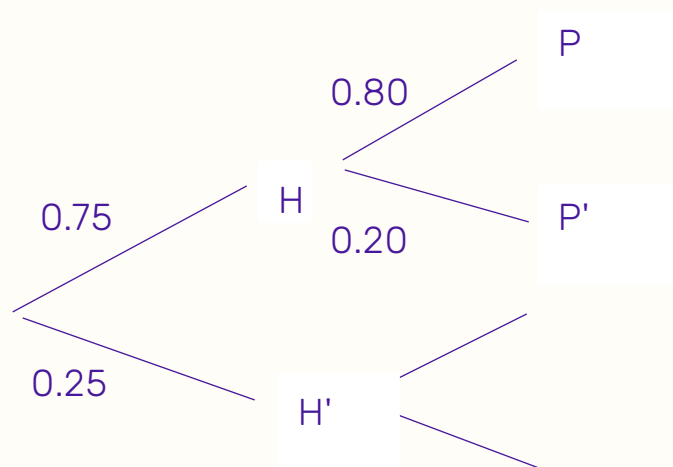
The probability that an employee is happy at work in the London office is 0.65.

Question 12 solution:

The probability is 0.35.

Question 13 solution:

The probability is 0.6. Find a probability tree below:

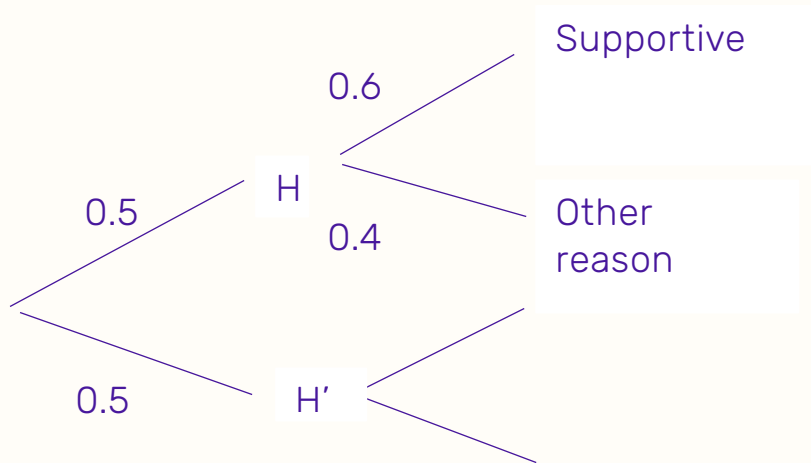


0.6.

Question 14 solution:

The probability that an employee is unhappy at work in the Brighton office (mentioned in question 13) is 0.25.

Question 15 solution:



Question 16 solution:

Using the probability tree diagram from Question 15, the probability that an employee is happy at work due to a supportive work culture is 0.3.

Question 17 solution:

Using the probability tree diagram from Question 15, the probability that an employee is unhappy at work is 0.5.

