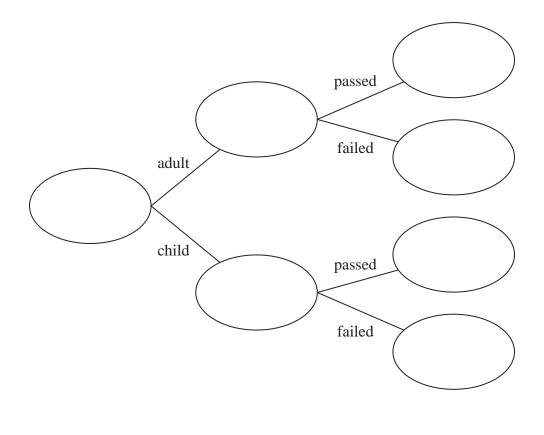
1 72 people did a test.

20 of the 32 adults who did the test passed. 6 of the children who did the test failed.

(a) Use this information to complete the frequency tree.



(3)

One of these people is picked at random.

(b) Find the probability that this person is an adult who failed the test.

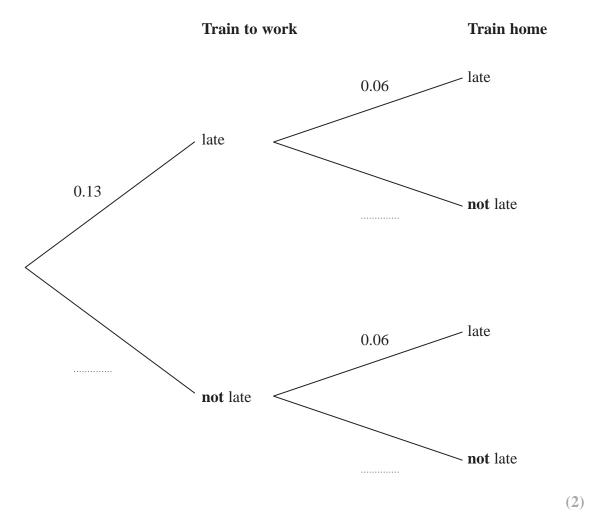
(2)

(Total for Question 1 is 5 marks)

2 Lorena gets a train at the same time each morning to go to work. She gets a train at the same time each evening to come home.

The probability tree diagram shows the probabilities of each train arriving late.

(a) Complete the probability tree diagram.



For a day that Lorena goes to work,

(b) work out the probability that the train to work and the train home will both arrive late.

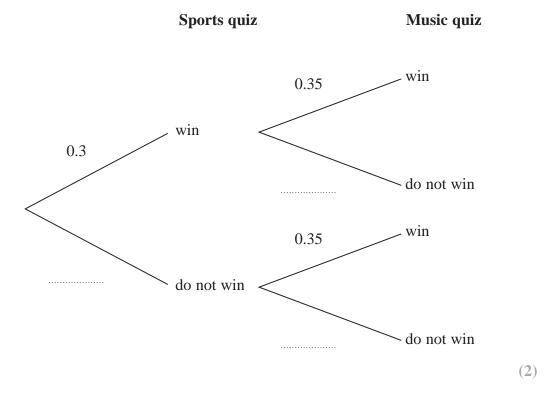
(2)

(Total for Question 2 is 4 marks)

3 One weekend the Keddie family is going to do a sports quiz and a music quiz.

The probability that the family will win the sports quiz is 0.3 The probability that the family will win the music quiz is 0.35

(a) Complete the probability tree diagram.

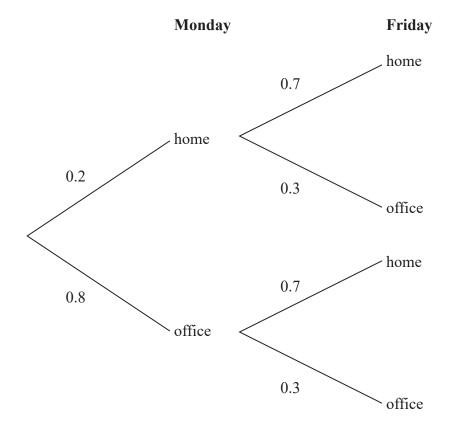


(b) Work out the probability that the Keddie family will win both the sports quiz and the music quiz.

(2)

(Total for Question 3 is 4 marks)

4 The probability tree diagram shows the probabilities that Shayla will work at home or will work at the office on two days next week.

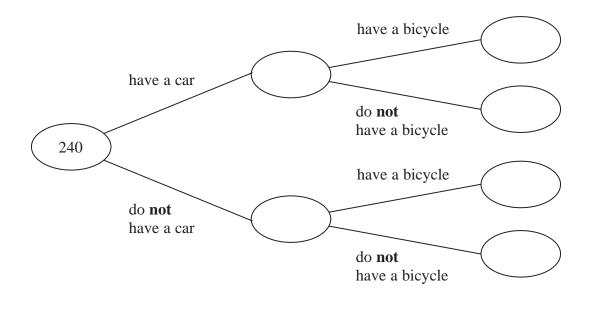


Work out the probability that Shayla will work at home on Monday and work at the office on Friday.

.....

(Total for Question 4 is 2 marks)

- **5** 240 people work at a factory.
  - Of these people
    - 150 have a car110 have a bicycle65 of the people who have a bicycle do **not** have a car.
  - (a) Use this information to complete the frequency tree.



(b) What percentage of the 150 people who have a car also have a bicycle?

.....%

(3)

(Total for Question 5 is 5 marks)