## 20 Oct 04 Paper 2

A gardener plants seeds from a packet of 25 seeds.
14 of the seeds will give red flowers and 11 will give yellow flowers.
The gardener chooses two seeds at random.

(a) Write the missing probabilities on the tree diagram below.

First seed      Second seed

```
                                    13
                                    ──
                              .──────24──── Red
                   14        /
                  ──── Red  <
                   25        \    ...
                              `──────────── Yellow
          /
         <
          \                        ...
                   11        .──────────── Red
                  ──── Yellow<
                   25        \    ...
                              `──────────── Yellow
```

(b) What is the probability that the gardener chooses two seeds which will give

(i) two red flowers,

*Answer(b)(i)* ............................ [2]

(ii) two flowers of a different colour?

*Answer(b)(ii)* ............................ [2]

## May 05 Paper 2

18 Revina has to pass a written test and a driving test before she can drive a car on her own.
The probability that she passes the written test is 0.6.
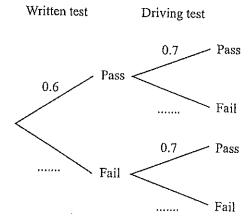The probability that she passes the driving test is 0.7.

(a) Complete the tree diagram below.

Written test      Driving test

```
                              0.7
                          .────────── Pass
               0.6   Pass<
              .─────<      .......
             /        `────────── Fail
            <
             \            0.7
              `──── Fail<──────── Pass
               .......     \
                            .......
                            `────── Fail
```

[1]

(b) Calculate the probability that Revina passes only one of the two tests.

*Answer (b)* ............................................ [3]