

Name: _____

1. A farmer had three water bores drilled on his farm. He was told the probability of water being found in any of the bores was 0.6.
- (a) Draw a tree diagram to show all possible outcomes and the probabilities of the water bores having water (W) or being dry (D).

(b) Find the following probabilities giving answers as decimals.

- (i) Pr(water is found in all three bores)

- (ii) Pr(water is found in at least one bore)

- (iii) Pr(none of the bores have water)

2. A music festival was organised to be held on a long weekend (three days) in April at Rock Bay. On average it rains six days in April in Rock Bay.

- (a) What is the probability that it rains on a particular day in Rock Bay in April?

Give answer as a fraction in its simplest form.

- (b) Draw a tree diagram to show all possible outcomes and the probabilities of rain occurring on any of the three days of the music festival.

(b) Find the following probabilities. Give answers as fractions in their simplest form.

- (i) Pr(it rains on all three days)

- (ii) Pr(it rains on more than one day)

- (iii) Pr(there is no rain for the three days)