

# Year Ten Advanced Homework Term 4, Sheet 4 Probability

Name: \_\_\_\_\_

Due Date: \_\_\_\_\_

1. Match up using the language of probability:

It will rain tomorrow	<b>Impossible</b>
I will do my homework tonight	<b>Unlikely</b>
I will watch TV tonight	<b>50 - 50</b>
Carlton will win the 2013 AFL premiership	<b>Likely</b>
I will try my hardest in maths this term	<b>Certain</b>

2. Draw a lattice diagram showing the outcomes when a die is rolled and a coin is tossed. Be neat.

a) What is the probability of getting a head and a six?

b) What is the probability of getting a tail and a number greater than three?

c) What is the probability of getting a head and a tail?

3. Draw a tree diagram to show a coin being tossed and then a die being rolled. Be neat.

4. A bag contains 12 beans. Three are black, two are blue and the rest are white.

a) How many beans are white?

Find the probability of the following being drawn:

b) Pr (Black) =

c) Pr (Black or Blue) =

d) Pr (Purple) =

5. An ordinary pack of cards is shuffled and one card is drawn out. What is the probability that it is:

a) the five of diamonds?

b) a red card?

c) an ace?

d) a picture card and red?

e) a card that is black and less than five?