Question 1

Pauline flips a fair coin 3 times, and records the outcomes.
She writes H for each head and T for each tail.

(i) Complete the table below to show all of the possible outcomes.
Two outcomes have already been filled in for you.

HHH	
HHT	

(ii) Find the probability of getting two heads and one tail.

(iii) Jamie says: "You have the same probability of getting three heads as you do of getting two heads and one tail."
Do you agree with Jamie? Give a reason for your answer.

Answer:

Reason:

(iv) Max says: "You have the same probability of getting HHH as you do of getting HTH."
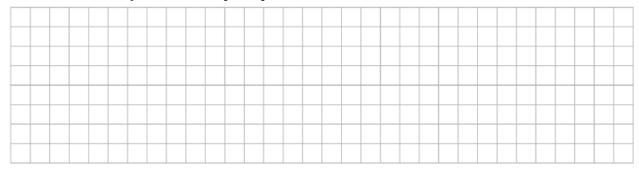Do you agree with Max? Give a reason for your answer.

Answer:

Reason:

Question 2

A football strip consists of a shirt, shorts and socks.

Aspen United has two shirts, blue and green, from which to select. They also can select from three different colours of shorts and five different colours of socks, including red in each case.

(a) Calculate how many different strips Aspen United can have.

(b) Willow Celtic plays in an all red strip. When Aspen United plays Willow Celtic, Aspen United are not allowed to use their red shorts or their red socks. Calculate how many different strips Aspen United can have when they play Willow Celtic.