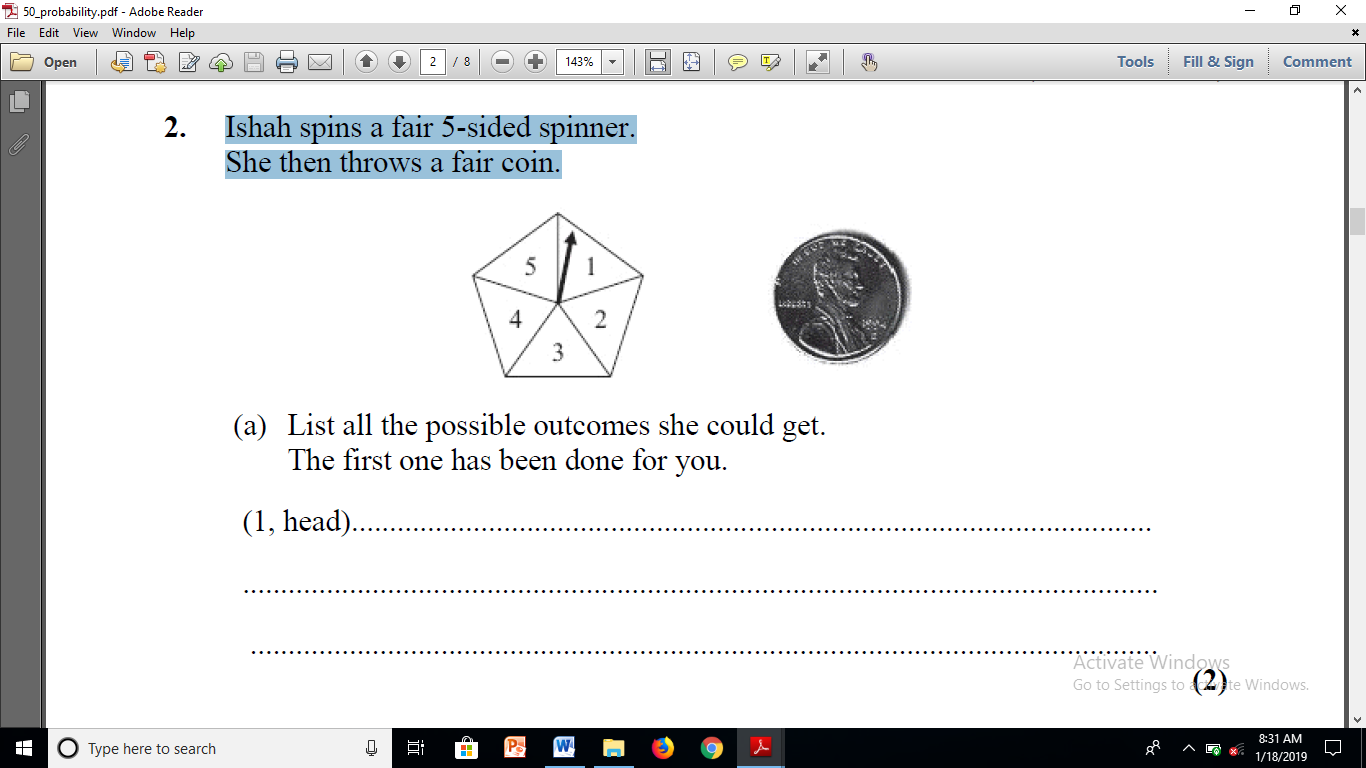
**Teacher Name:** M. Shaheryar Khan **Class:** 11 **Subject:** Mathematics **Date:** 21/1/19

1. Ishah spins a fair 5-sided spinner. She then throws a fair coin.



(a) List all the possible outcomes she could get.

The first one has been done for you.

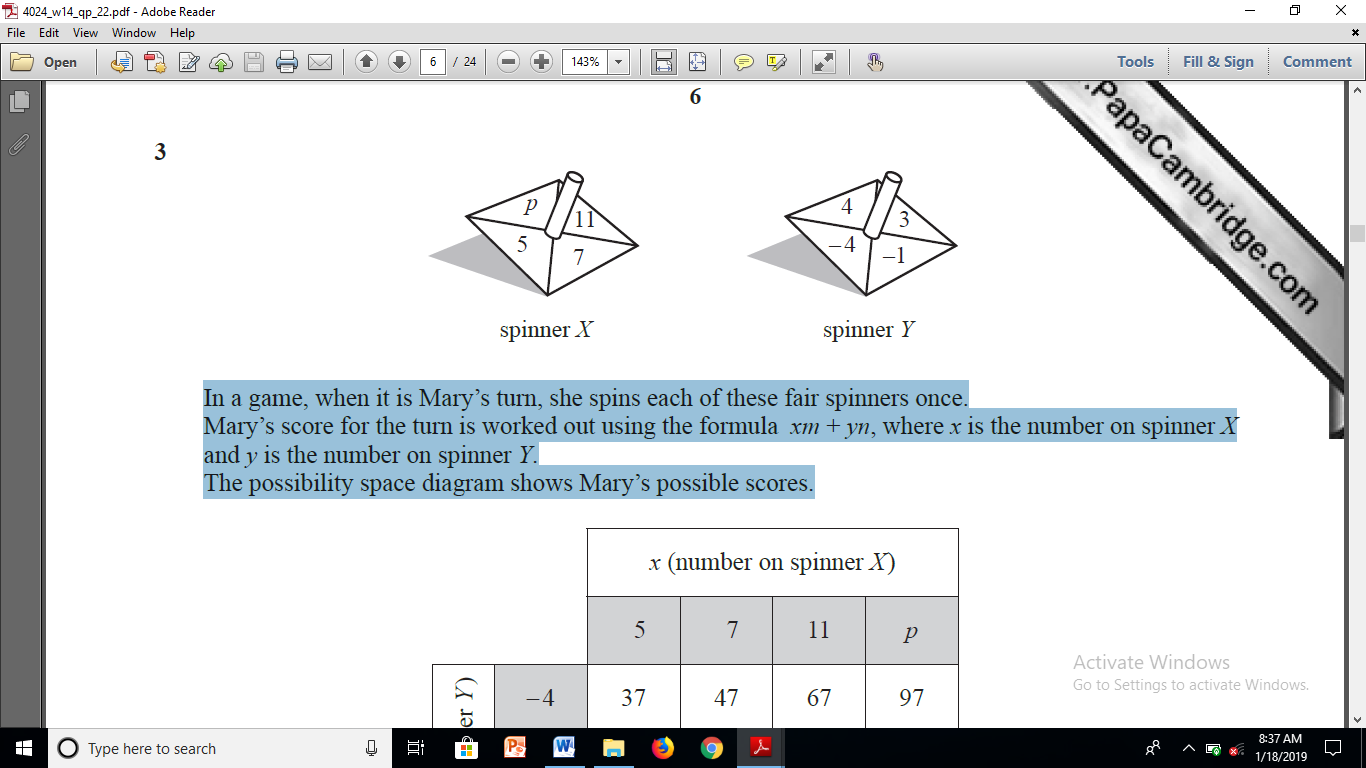
(1, head)………………………………………………………………………………..

Ishah spins the spinner once and throws the coin once.

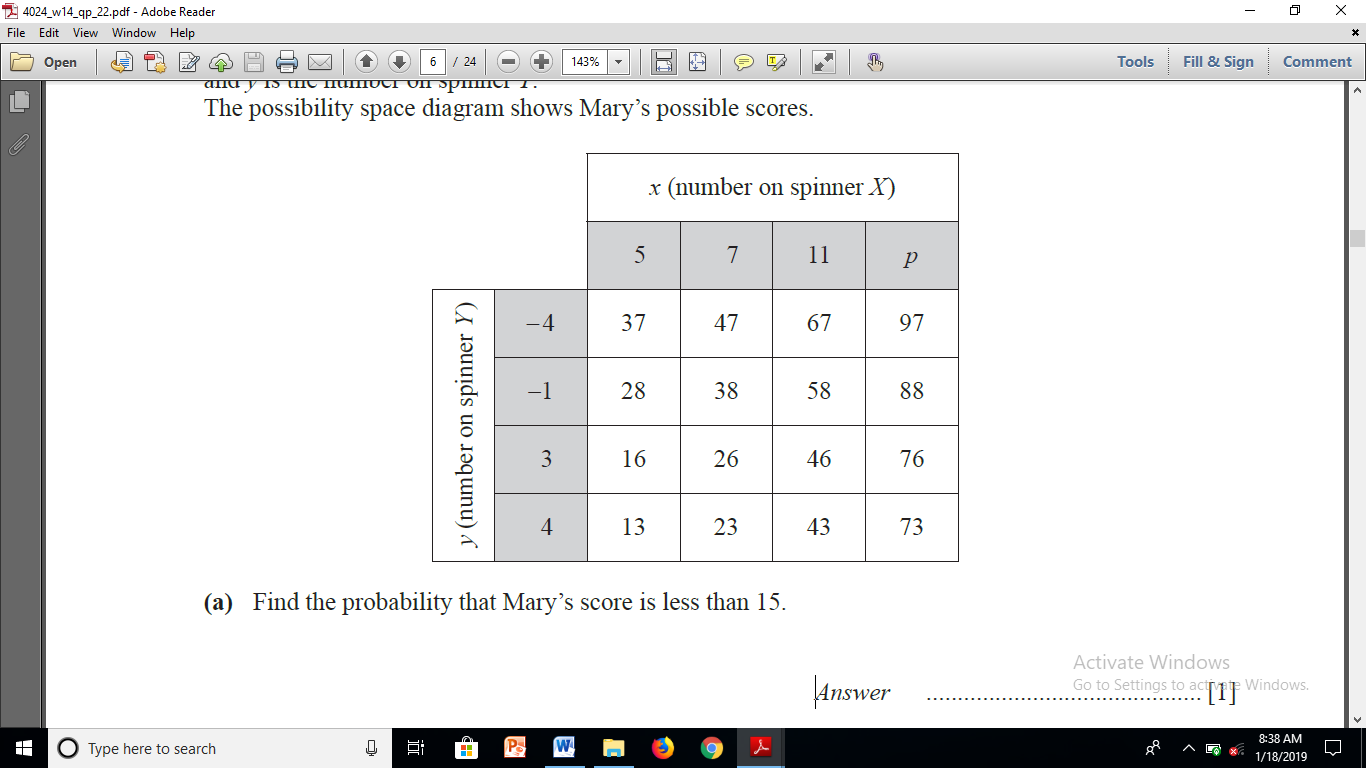
(b) Work out the probability that she will get a 1 and a head.

1. In a game, when it is Mary’s turn, she spins each of these fair spinners once.

Mary’s score for the turn is worked out using the formula xm + yn, where x is the number on spinner X and y is the number on spinner Y.



The possibility space diagram shows Mary’s possible scores.



1. Find the probability that Mary’s score is less than 15.
2. Calculate the probability that on two consecutive turns, Mary scores less than 40 on one and more than 75 on the other.
3. The diagram shows 7 on spinner X and –1 on spinner Y. Using the formula, the score for this turn is 7m – n = 38.
4. Using the table, find 7m + 3n.
5. Hence find m and n.
6. Find p.

**Answers:**

1. 1/6
2. 21/128.
3. (i) 7m+3n=26

(ii) m=5 n= -3

1. P= 17.