



Aberdare Community School
Mathematics Department

WJEC GCSE

Higher – Non Calculator
Data

Probability games

Name:

Set:

Date:

Teacher:

4. In a game a player rolls a coin onto a squared board. The squares on the board are coloured red, blue, green or yellow. If the coin lands entirely within one of these coloured squares the player wins a prize, otherwise the player loses.

The table below shows the probabilities of the coin landing entirely within the coloured squares.

Colour	Red	Blue	Green	Yellow	Player loses
Probability	0.15	0.09	0.05	0.06	0.65

- (a) One day 200 people play this game. Approximately how many would you expect to win a prize?

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[2]

- (b) It costs 80p to play the game once. The prize for winning is £2. If the 200 people play the game once, approximately how much profit do you expect the game to make?

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