

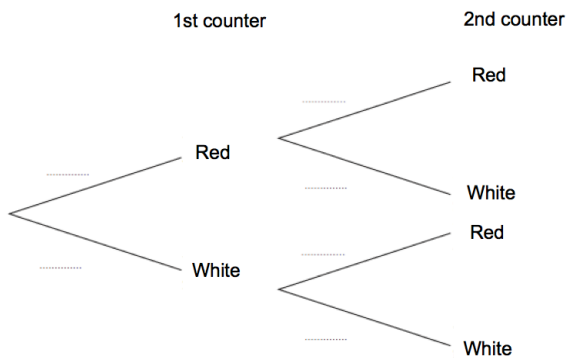
1st February



Corbettmaths

Solve $m^2 + 24m + 63 = 0$

Solve $m^2 - 16m + 64 = 0$



Complete the probability tree diagram.

George has a bag of marbles.
 There are 5 red and 7 white marbles.
 George takes out a marble at random
 and records the colour.
 George puts the marble back into the
 bag and then takes out another marble.

Find the probability that the two marbles
 are red

James has organised a game to raise
 money for charity at a local fair.
 He rolls a fair six sided dice and flips a
 fair coin.
 If the coin lands on heads, the number
 on the dice is **squared**.
 If the coin lands on tails, the number on
 the dice is **cubed**.

Each person pays 50p to play.
 If they score above 30, they win £1
 The game is played 450 times.

How much money does James raise for
 charity?

