

GCSE Revision - Probability

19. [Nov 2013 NonCalc] In a supermarket, the probability that John buys fruit is 0.7.

In the same supermarket, the probability that John independently buys vegetables is 0.4.

Work out the probability that John buys fruit or buys vegetables or buys both.

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(Total for Question 19 is 3 marks)

24. [March 2013 NonCalc] There are three different types of sandwiches on a shelf.

There are

4 egg sandwiches,
5 cheese sandwiches
and 2 ham sandwiches.

Erin takes at random 2 of these sandwiches.

Work out the probability that she takes 2 different types of sandwiches.

26. [June 2013 NonCalc] Fiza has 10 coins in a bag.
There are three £1 coins and seven 50 pence coins.

Fiza takes at random, 3 coins from the bag.

Work out the probability that she takes exactly £2.50.

21. [Nov 2012 Calc] Here are seven tiles.



Jim takes at random a tile.
He does **not** replace the tile.

Jim then takes at random a second tile.

(a) Calculate the probability that both the tiles Jim takes have the number 1 on them.

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(2)

(b) Calculate the probability that the number on the second tile Jim takes is greater than the number on the first tile he takes.

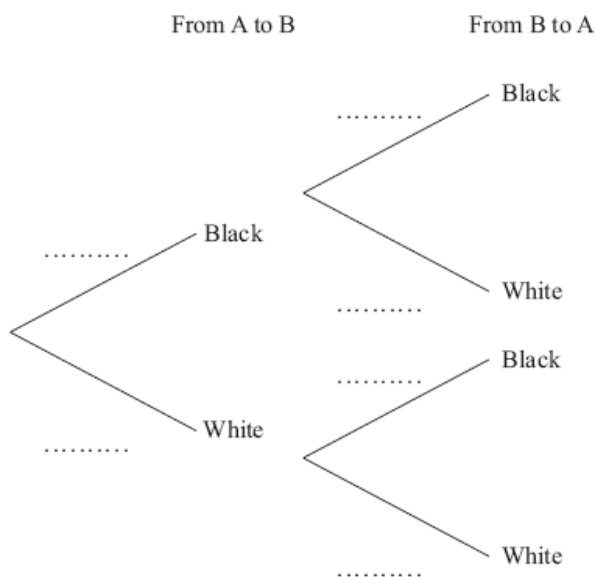
25. [June 2012 NonCalc] Carolyn has 20 biscuits in a tin.
 She has
 12 plain biscuits
 5 chocolate biscuits
 3 ginger biscuits
 Carolyn takes at random two biscuits from the tin.

Work out the probability that the two biscuits were **not** the same type.

22. [Nov 2011 NonCalc] Jan has two boxes.
 There are 6 black and 4 white counters in box A.
 There are 7 black and 3 white counters in box B.

Jan takes at random a counter from box A and puts it in box B.
 She then takes at random a counter from box B and puts it in box A.

- (a) Complete the probability tree diagram.



(2)

- (b) Find the probability that after Jan has put the counter from box B into box A there will still be 6 black counters and 4 white counters in box A.

.....
 (4)

(Total 6 marks)

24. [June 2011 Calc] There are 5 red pens, 3 blue pens and 2 green pens in a box.

Gary takes at random a pen from the box and gives the pen to his friend.
Gary then takes at random another pen from the box.

Work out the probability that both pens are the same colour.

26. [Nov 2010] There are 11 buttons in a bag.

7 buttons are white.

4 buttons are black.

Harley takes a button at random from the bag, and keeps it.

She now takes another button at random from the bag.

Work out the probability that Harley takes a button of each colour.

