


Combinations (F)

A collection of 9-1 Maths GCSE Sample and Specimen questions from AQA, OCR, Pearson-Edexcel and WJEC Eduqas.

Name:	Shanks 
Total Marks:	

1. Three friends, Ann (A), Bob (B) and Carol (C), go on holiday together.

They book a row of three seats on the plane.

When they arrive at the plane they sit in a random order.

List all the different orders they could sit on the three seats.

The first one has been done for you.

Seat 1	Seat 2	Seat 3
A	B	C
A	C	B
B	A	C
B	C	B
C	A	B
C	B	A

[2]

2. A game is played by rolling a fair ordinary dice and throwing a fair coin.

- (a) List all the possible outcomes.

Dice	Coin
1	H
1	T
2	H
2	T
3	H
3	T
4	H
4	T
5	H
5	T
6	H
6	T

[2]

(b) Natalie wins if she gets an even number and a head.

What is the probability she wins?

(b) $\frac{3}{12} = \frac{1}{4}$ [1]

3. Sally has three tiles.



- 1 2 3
- 1 3 2
- 2 1 3
- 2 3 1
- 3 1 2
- 3 2 1

Each tile has a different number on it.

Sally puts the three tiles down to make a number.

Each number is made with all three tiles.

How many different numbers can Sally make?

so 6 different numbers.

[2]

4. In a box there are three types of chocolates.

- There are 6 plain chocolates,
- 8 milk chocolates
- and 10 white chocolates.

Deon takes 2 chocolates from the box.

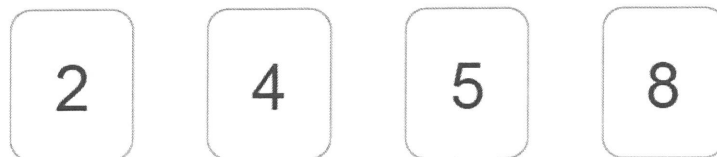
(b) Write down all the possible combinations of types of chocolates that Deon can take.

..... PM, PW, MW

..... PP, MM, WW

..... [2]

5. Beth uses these four cards to make 4-digit numbers.



How many different 4-digit numbers can she make that are greater than 8000?

- 8 2 4 5 8 2 5 4
- 8 4 2 5 8 4 5 2 so 6.
- 8 5 2 4 8 5 4 2

[2]