



Maths
Junior Certificate
Ordinary Level

Past Exam Questions on
PM Statistics and Data

Q4 2012 Paper 2 Sample Paper

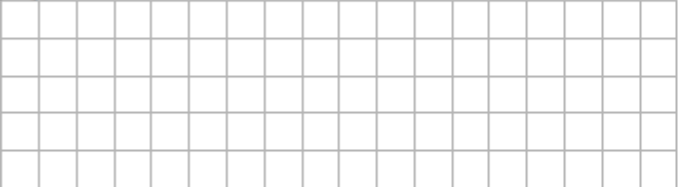
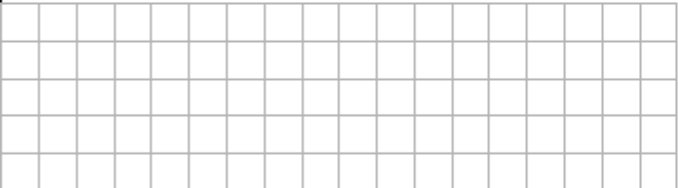
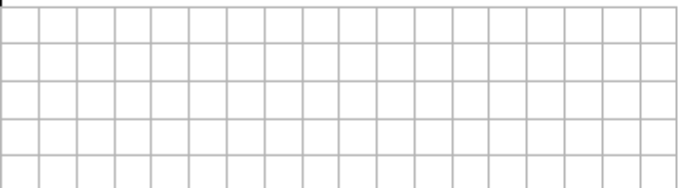
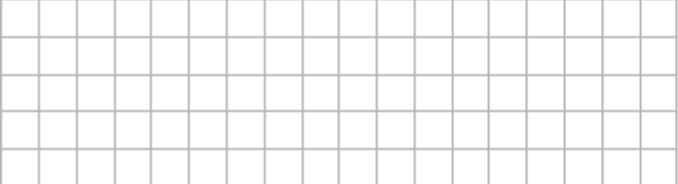
Question 4

(Suggested maximum time: 5 minutes)

A survey was conducted among third year students. The answers to survey questions can be classified as

- (i) Categorical data where the categories are not ordered
- (ii) Ordered categorical data
- (iii) Discrete numerical data
- (iv) Continuous numerical data

In each row in the table below, write a short question that you could include in a survey and that will give the type of data stated.

| Question: | Type of data: |
|--|---|
| Q1.  | Categorical data where the categories are not ordered |
| Q2.  | Ordered categorical data |
| Q3.  | Discrete numerical data |
| Q4.  | Continuous numerical data |

Q5 2012 Paper 2 Sample Paper

Question 5

(Suggested maximum time: 10 minutes)

The following question was asked on the phase 9 *CensusAtSchool* questionnaire:

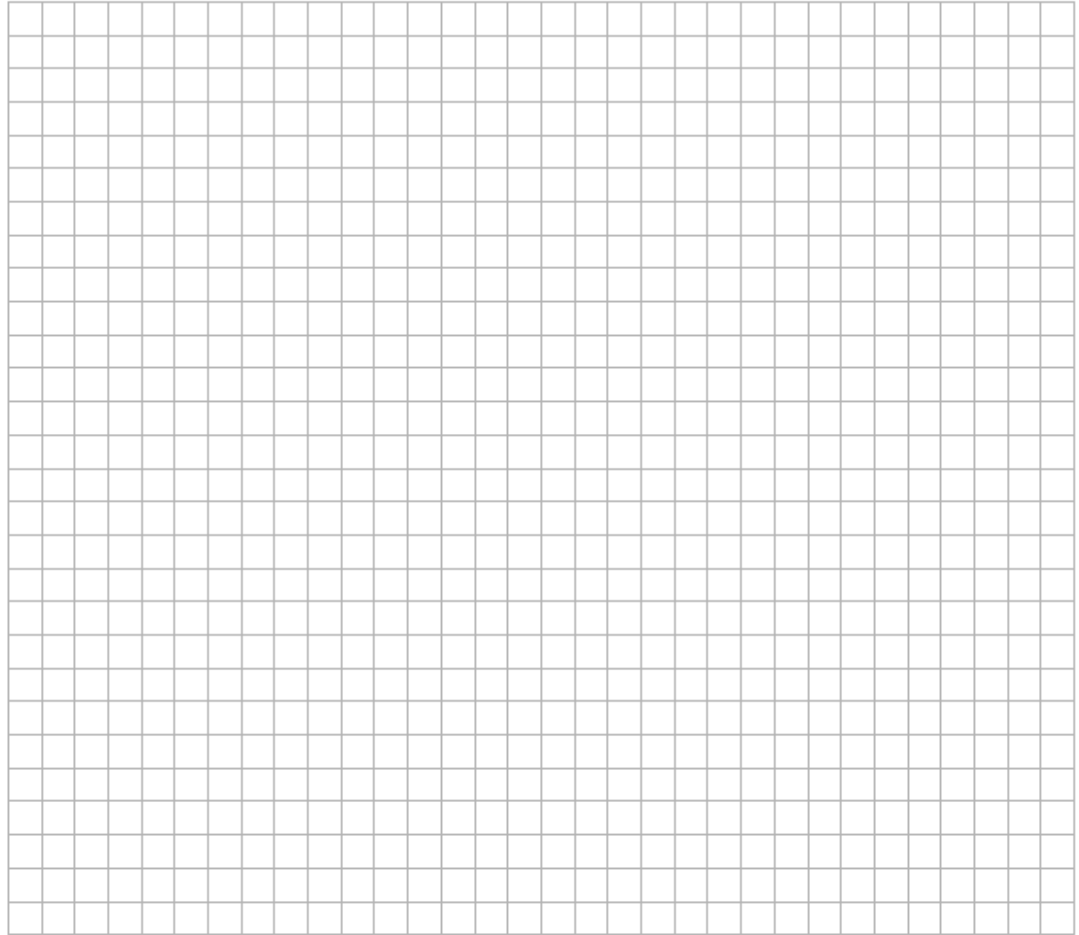
“Approximately how many hours per week do you spend on social networking sites?”

The data below are from two samples of students chosen at random from the UK and Ireland.

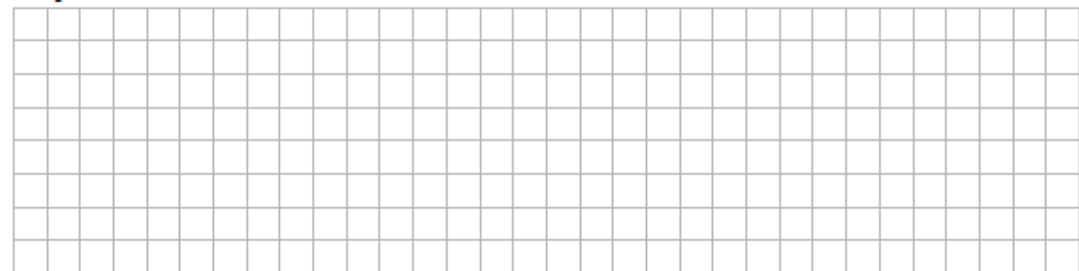
| Number of hours | UK Number of students | Ireland Number of students |
|-----------------|--------------------------|-------------------------------|
| 1 | | |
| 2 | 1 | 1 |
| 3 | 2 | 3 |
| 4 | 1 | 2 |
| 5 | 2 | 2 |
| 6 | 7 | 2 |
| 7 | | 3 |
| 8 | | |
| 9 | 1 | 5 |
| 10 | | 2 |
| 11 | | 3 |
| 12 | | 3 |
| 13 | 4 | 4 |
| 14 | 1 | 2 |
| 15 | 5 | |
| 16 | 5 | 5 |
| 17 | 2 | 1 |
| 18 | 4 | 2 |
| 19 | 5 | 4 |
| 20 | 3 | 2 |
| 21 | 2 | |
| 22 | 3 | |
| 23 | 1 | |
| 24 | | |
| 25 | 1 | 4 |

(a) How many students are in each sample? UK _____ Ireland _____

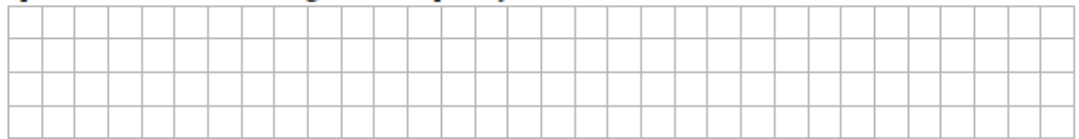
- (b) Display the data in a way that allows you to compare the two samples.
(Use a separate display for each sample.)



- (c) Based on your answer to part (b), what similarities and differences are there between the two samples?



- (d) Is it safe to say that there are differences between Irish and UK people regarding the time they spend on social networking sites? Explain your answer.



Q5 2012 Paper 2

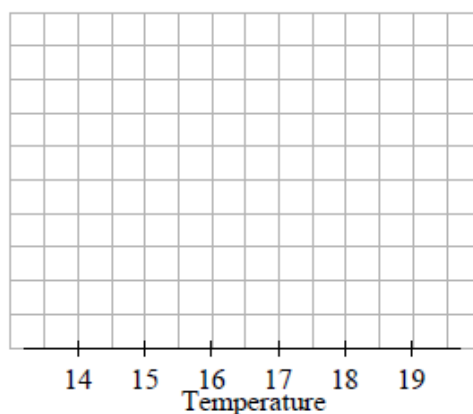
Question 5

(suggested maximum time: 10 minutes)

Karen went on holidays for two weeks in August 2011. Below is a record of the daily temperatures for the two weeks in August 2011.

| Day | Temperature |
|----------------------------|-------------|
| Monday 15 th | 17° |
| Tuesday 16 th | 18° |
| Wednesday 17 th | 16° |
| Thursday 18 th | 17° |
| Friday 19 th | 16° |
| Saturday 20 th | 18° |
| Sunday 21 st | 17° |
| Monday 22 nd | 19° |
| Tuesday 23 rd | 17° |
| Wednesday 24 th | 15° |
| Thursday 25 th | 15° |
| Friday 26 th | 15° |
| Saturday 27 th | 14° |
| Sunday 28 th | 17° |

- (a) What was the temperature on Thursday 18th of August? _____.
- (b) Use a line plot to show the number of times each temperature was recorded.



- (c) What is the range of the data? _____.

Q6 2012 Paper 2

Question 6

(suggested maximum time: 10 minutes)

There are 22 players on the Irish rugby squad for a game. Their heights (in centimetres) are given below.

180, 188, 185, 180, 183, 177, 180, 183, 198, 191, 191,
185, 185, 180, 185, 196, 180, 188, 180, 183, 191, 193

- (a) What is the height of the tallest player? _____
- (b) How many of the players are over 184 cm in height? _____
- (c) What percentage of the players are below 181 cm in height? Give your answer correct to the nearest whole number.

| | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | | | |
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The arm spans (in centimetres) of the same players in the same order are given below.

180, 184, 188, 178, 182, 176, 180, 185, 201, 190, 189,
185, 186, 182, 182, 196, 181, 189, 178, 184, 190, 193

