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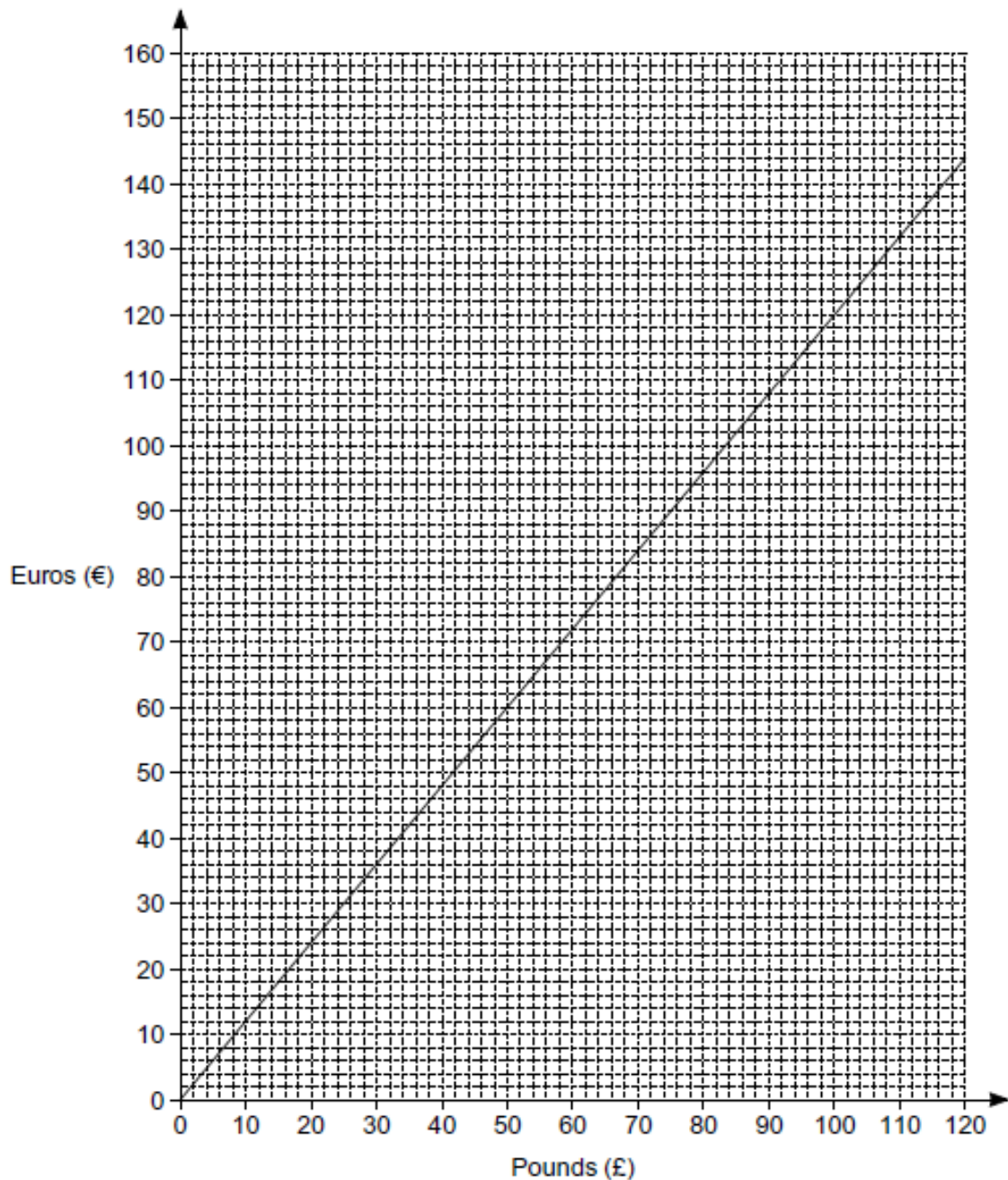
A collection of 9-1 Maths GCSE Sample and Specimen questions from AQA, OCR, Pearson-Edexcel and WJEC Eduqas.

Name:	
Total Marks:	

1. This is a conversion graph between pounds and euros.

(a) Convert £36 into euros.

(a) € .... [1]

(b) (i) Convert €400 into pounds.

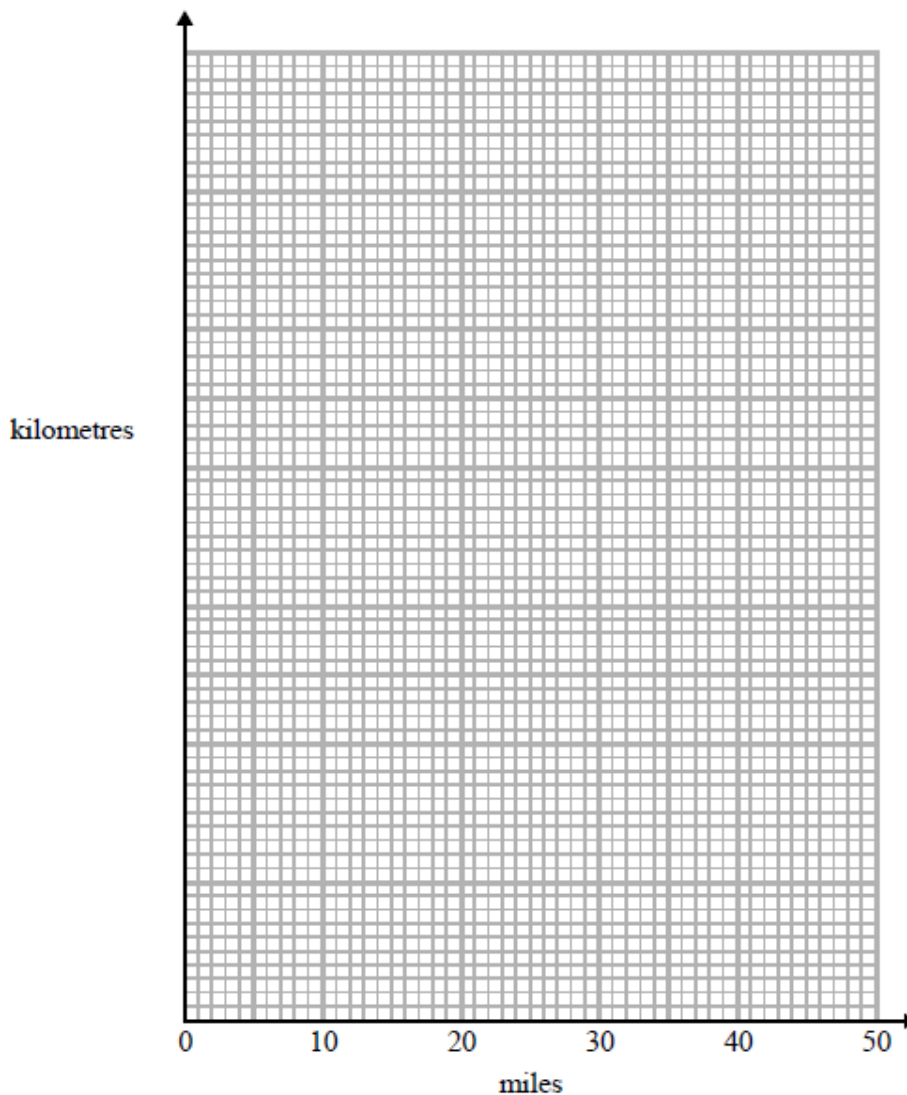(i) £ .... [3]

(ii) State an assumption that you have made in working out your answer to part (i).

[1]

(c) Explain how the graph shows that the number of euros is directly proportional to the number of pounds.

[2]

2. You can use the information in the table to convert between kilometres and miles.

miles	0	5	20	40
kilometres	0	8	32	64

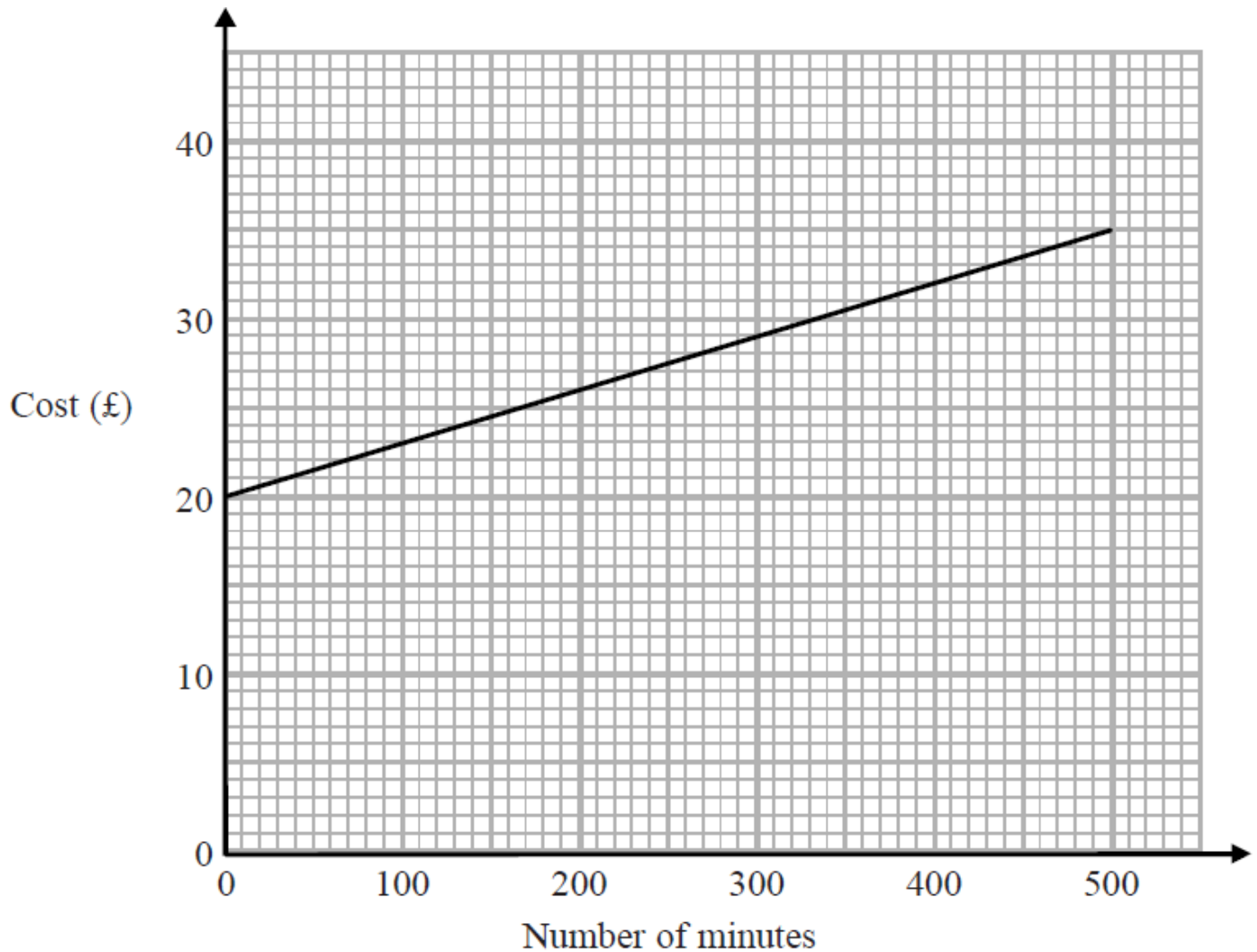(a) Use this information to draw a conversion graph. [3]

(b) Which is further, 20 kilometres or 15 miles?

You must show how you got your answer.

[2]

3. The graph shows the cost of using a mobile phone for one month for different numbers of minutes of calls made.
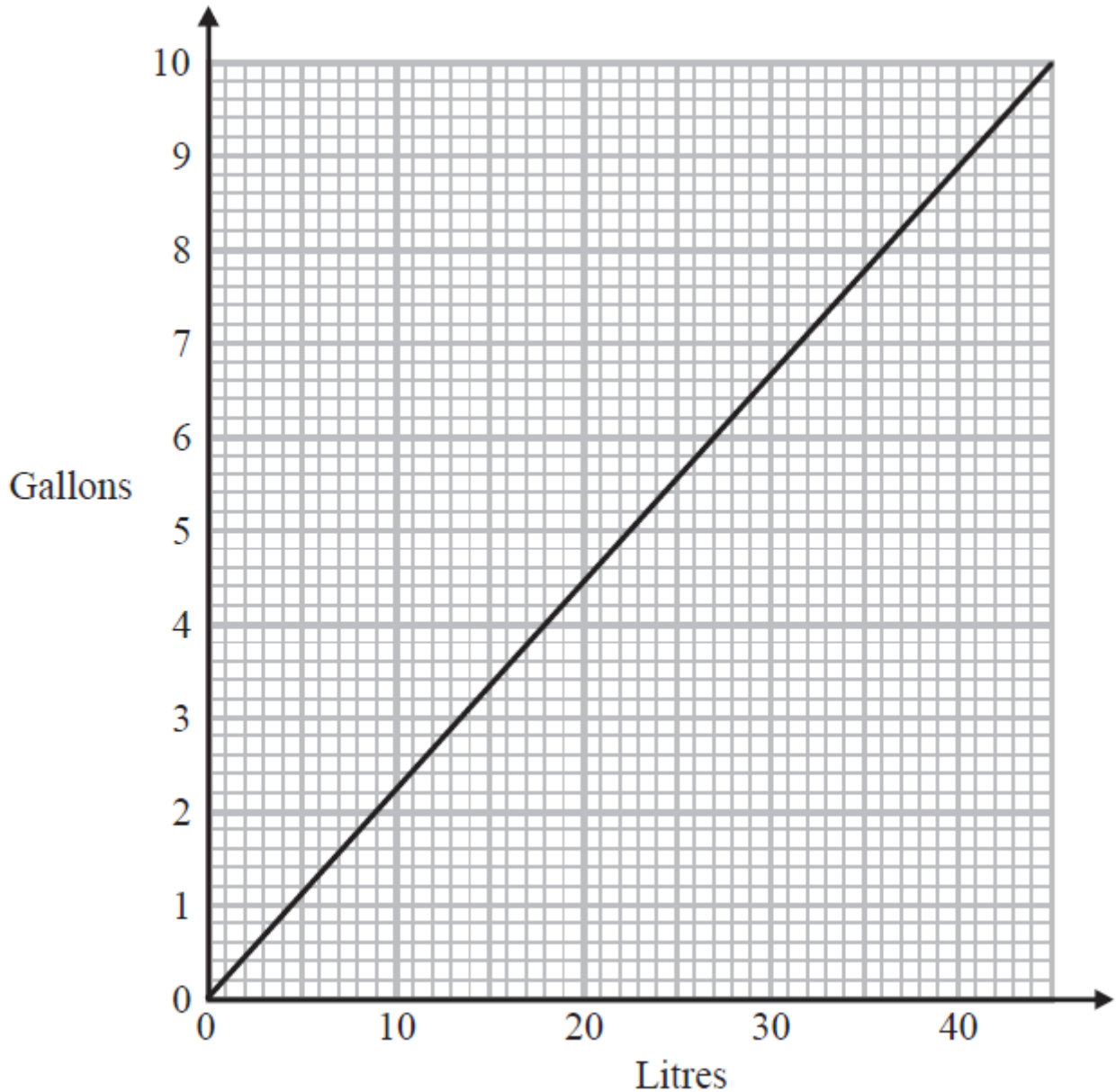

The cost includes a fixed rental charge of £20 and a charge for each minute of calls made.

Work out the charge for each minute of calls made.

[2]

4. You can use this graph to change between litres and gallons.

Which is the greater, 60 litres or 12 gallons?

You must show how you get your answer.
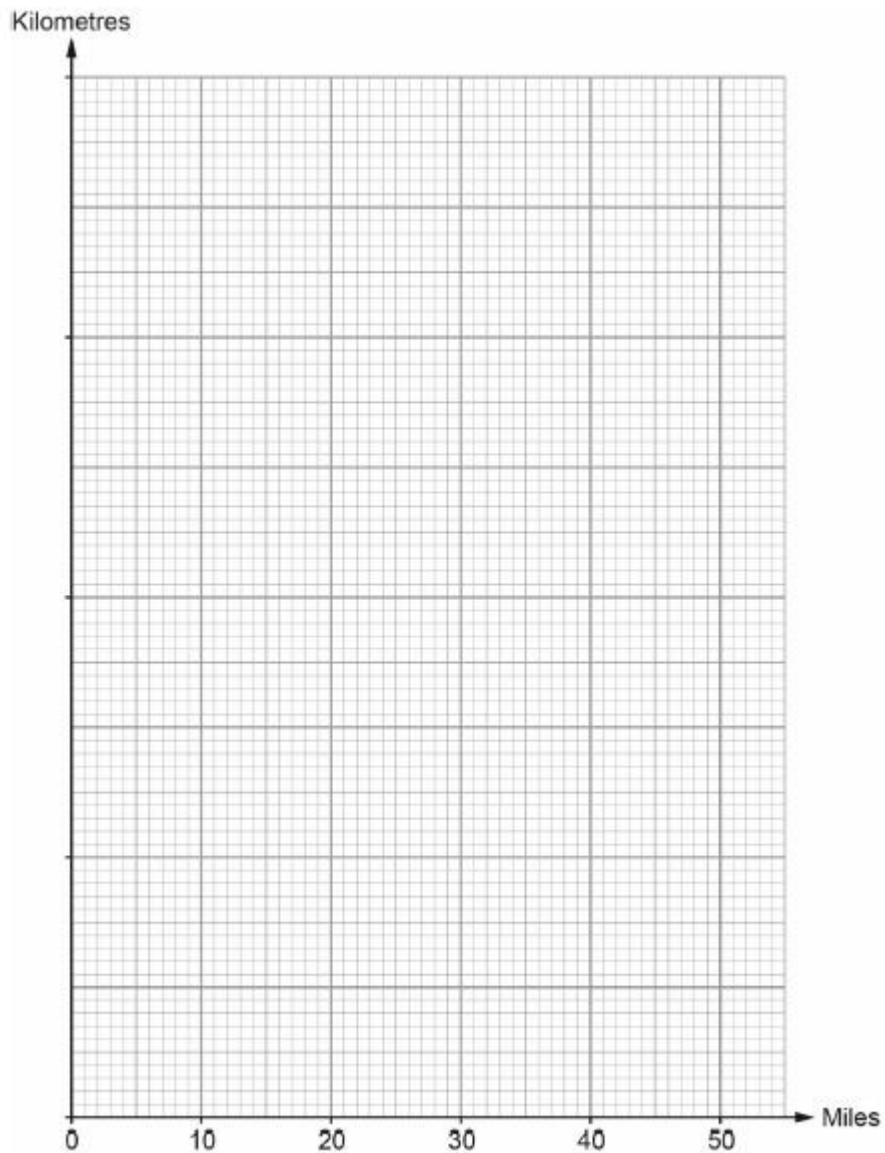
.... [2]

5. Martin prefers to measure distances in kilometres rather than miles.

The following table shows the number of miles and the number of kilometres for each of three distances.

Miles	5	30	42·5
Kilometres	8	48	68

(a) Use the data in the table to draw a conversion graph.

Kilometres

Miles

0   10   20   30   40   50

[3]

The distance between Martin's house and his favourite bicycle shop is 70miles.

Explain how he can use the graph to find this distance in kilometres.

Complete the following sentence:

70miles is approximately .... km.

[2]

CREDITS AND NOTES

Question	Awarding Body
1	OCR
2	Pearson Edexcel
3	Pearson Edexcel
4	Pearson Edexcel
5	WJEC Eduqas

Notes:

These questions have been retyped from the original sample/specimen assessment materials and whilst every effort has been made to ensure there are no errors, any that do appear are mine and not the exam board s (similarly any errors I have corrected from the originals are also my corrections and not theirs!).

Please also note that the layout in terms of fonts, answer lines and space given to each question does not reflect the actual papers to save space.

These questions have been collated by me as the basis for a GCSE working party set up by the GLOW maths hub - if you want to get involved please get in touch. The objective is to provide support to fellow teachers and to give you a flavour of how different topics "could" be examined. They should not be used to form a decision as to which board to use. There is no guarantee that a topic will or won't appear in the "live" papers from a specific exam board or that examination of a topic will be as shown in these questions.

Links:

AQA http://www.aqa.org.uk/subjects/mathematics/gcse/mathematics-8300

OCR http://ocr.org.uk/gcsemaths

Pearson Edexcel http://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-2015.html

WJEC Eduqas http://www.eduqas.co.uk/qualifications/mathematics/gcse/

Contents:

This version contains questions from:

AQA – Sample Assessment Material, Practice set 1 and Practice set 2

OCR – Sample Assessment Material and Practice set 1

Pearson Edexcel – Sample Assessment Material, Specimen set 1 and Specimen set 2

WJEC Eduqas – Sample Assessment Material