

Maths Revision Booklet

for CCEA GCSE 2-tier specification

M7

Conor McGurk

Name:

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Revision Exercise 1A

(non-calculator)



You must not use a calculator for this paper. Total mark for this paper is 50.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

You should have a ruler, compasses, set-square and protractor.

1. Put the following fractions in ascending order:

$$\frac{1}{2}, \frac{2}{3}, \frac{1}{4}, \frac{5}{12}$$

Answer _____, _____, _____, _____ [2]

2. A fair dice is tossed once.
Four different outcomes are given below:

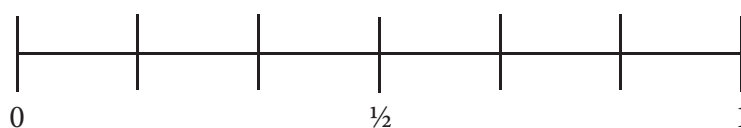
Outcome A: getting a 7 on the dice.

Outcome B: getting a 3 on the dice.

Outcome C: getting a prime number on the dice.

Outcome D: getting a number less than 5.

Write the correct letter A, B, C or D opposite the probability of that outcome happening on the scale below.



[4]

3. (a) Estimate $\sqrt{39}$

Answer _____ [1]

- (b) The length of a toy car is 8.6 cm correct to one decimal place.
What is the maximum total length of 4 of these toy cars?

Answer _____ cm [2]

4. The parking charges at a city centre park are 55 pence per hour.

- (a) Michael pays £2.75 to park his car.
How many hours did he pay for?

Answer _____ hours [2]

The parking meter takes the following coins:
£2, £1, 50p, 20p, 10p, 5p

- (b) What is the least number of coins he can use to pay the exact amount £2.75?
Show your working.

Answer _____ coins [2]

- (c) Michael uses **exactly** 6 coins to pay.
Show **three** different ways he could have paid.

Answer _____, _____, _____ [3]

5. Using a ruler and compasses only, construct an equilateral triangle of side 8 cm.

6. A restaurant has a 3 course menu with 6 starters, 8 main courses and 5 desserts.
(a) How many different combinations are available if a customer chooses a starter, a main course and a dessert?

Answer _____ [2]

- (b) A customer who is not very hungry decides to order only 2 courses.
Does she have a greater choice of combinations now than had she ordered 3 courses?
Show all your working.

Answer _____ because _____ [3]

7. A box contains a total of 4 balls; some are green and the rest are pink.
A ball is chosen at random and is then replaced before choosing again.
Given that the probability of choosing 2 green balls = $\frac{1}{16}$, how many green balls are there in the box?

Answer _____ [3]

8. Orange paint can be made by mixing 3 parts red paint with 5 parts yellow paint, i.e. ratio 3:5
A painter has 12 litres of red paint and 25 litres of yellow paint.
What is the maximum amount of orange paint that she can make?

Answer _____ litres [3]
