

# GCSE Boot Camp

## Foundation Maths Week 1 Workbook

Questions



# GCSE Boot Camp

## Topics

**Hello! You've made a great decision by signing up for our 8 Week Boot Camp.**

Every week you'll get a practice workbook to work through a range of topics, taken from our GCSE Foundation Advanced course.

We've also included links to 2 of our expert tutorial videos on some of these exact questions. That way, if you get stuck, you can try watching one of our tutorial videos with our Maths expert Patricia. For [full access to all of the corresponding videos](#) sign up for a SchoolOnline subscription from £8.99 a month.

In next week's email we'll send you the answers to this workbook to download *PLUS* a brand new workbook to practice.

*Week 1's workbook topics are:*

- Algebra
- Ratio, Proportion and Rates of Change



# GCSE Foundation Maths - Unit 1 Algebra

Algebra - Simplifying

## June 2018 Foundation Calc Paper 2

20 (a) Simplify  $m^3 \times m^4$

.....  
(1)

(b) Simplify  $(5np^3)^3$

.....  
(2)

(c) Simplify  $\frac{32q^9r^4}{4q^3r}$

.....  
(2)

(Total for Question 20 is 5 marks)

Factorising

## Sample A Foundation Calc Paper 2

20 (a) Factorise  $3f + 9$

.....  
(1)

(b) Factorise  $x^2 - 2x - 15$

.....  
(2)

(Total for Question 20 is 3 marks)

Factorising

## June 2017 Foundation Calc Paper 2

14 (a) Factorise  $5 - 10m$

.....  
(1)

(b) Factorise fully  $2a^2b + 6ab^2$

.....  
(2)

(Total for Question 14 is 3 marks)

Algebra

## Sample B Foundation Calc Paper 2

17 (a) Simplify  $7x + 2y - 3x + 4y$

.....  
(2)

(b) Factorise  $10x - 15$

.....  
(1)

(c) Solve  $5p = 3p + 8$

$p =$  .....  
(2)

(Total for Question 17 is 5 marks)

Expanding brackets

## Sample A Foundation Non-Calc Paper 1

22 Expand and simplify  $(m + 7)(m + 3)$

.....  
(Total for Question 22 is 2 marks)

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**Need some extra help? That's what we're here for!**

In this video Patricia will explain how to answer the final question in the Algebra section of your workbook that looks at expanding brackets (Q22) from the Sample A Foundation Non-Calculator Paper 1.

Grab your pen and paper and remember to take notes! If you want more access to awesome videos like this, [sign up for a full SchoolOnline subscription here.](#)



# GCSE Foundation Maths - Unit 1 Ratio, Proportion and Rates of Change

Compound Interest

## June 2017 Foundation Calc Paper 2

22 Anil wants to invest £25000 for 3 years in a bank.

<p><b>Personal Bank</b></p> <p>Compound Interest</p> <p>2% for each year</p>
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<p><b>Secure Bank</b></p> <p>Compound Interest</p> <p>4.3% for the first year</p> <p>0.9% for each extra year</p>
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Which bank will give Anil the most interest at the end of 3 years?  
You must show all your working.

(Total for Question 22 is 3 marks)

Percentage Increase

## June 2017 Foundation Non-Calc Paper 1

**20** Azmol is paid £1500 per month.

He is going to get a 3% increase in the amount of money he is paid.

Work out how much money Azmol will be paid per month after the increase.

£.....

**(Total for Question 20 is 2 marks)**

Distance, Speed, Time

## Sample B Foundation Calc Paper 2

**16** A sprinter runs a distance of 200 metres in 25 seconds.

Work out the average speed of the sprinter.

.....m/s

**(Total for Question 16 is 1 mark)**

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**Need some extra help? That's what we're here for!**

In this video Patricia will explain how to answer the final question in the Ratio, proportion and rates of change section on Distance, Speed and Time (Q16).

Grab your pen and paper and remember to take notes! If you want more access to awesome videos like this, [sign up for a full SchoolOnline subscription here.](#)

