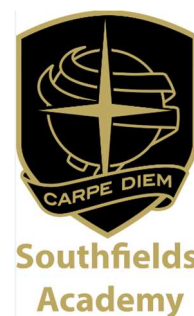# Mature mathematics 2021/22

Starter for 12

Mr. Alex Spencer

alexander.spencer@southfieldsacademy.com

1. Welcome to mature maths at Southfields Academy

This is for all students who got between a 3-1 in their maths GCSE.

We offer a range of courses suitable to your needs and with your future ambitions in mind, including:

- **Mature maths GCSE, and**
- **Functional skills level maths (Entry level, level 1 & level 2).**

2. In your first week of mature maths

Each student will receive:

- **Question level analysis of their Summer 2019 GCSE maths exams.**
    - **This will help you and your teacher identify the key topics to focus on to improve your grade.**
- **Access to all the OCR maths GCSE past papers.**
- **A Hegarty maths login and password.**
- **Topic targeted worksheets to help you improve. E.g. If you did poorly in probability in your GCSE paper, you can get extra support and practice on this.**
- **Access to discounted GCSE revision guides.**

You will receive two hours of timetabled contact time with your maths teacher each week.

3. Expectations

To improve your maths GCSE grade you will need to become, if you aren't already, a good independent learner. Your mature maths teacher will help you do this.

If you only do two hours of maths a week, in your lessons, this will not be enough to improve your grade. We will expect you to complete a lot of maths work independently, outside of lessons.

We will expect you:

- To understand your current strengths and weaknesses in maths and actively address your areas of improvement. [Using your question level analysis.]
- Complete all homework set.
- Complete past exam papers as directed by your maths teacher.
- Use the fantastic range of websites below to support your study.
  - www.mathswatchvle.com
  - www.hegartymaths.com
  - www.corbettmaths.com/5-a-day/gcse1/
  - www.mrbartonmaths.com/gcse.htm
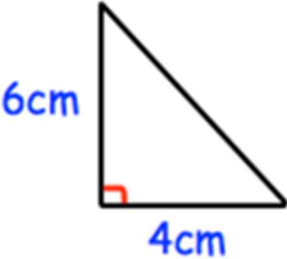
4. Please attempt the questions

…in this booklet before your first mature maths lesson. You can find answers at the website below. Look at January 1 & January 2 Foundation:

https://corbettmaths.com/5-a-day/gcse/

With hard work, you can achieve whatever you want to achieve in maths. If you have any questions about mature mathematics at Southfields Academy please ask Mr Alex Spencer in A227.
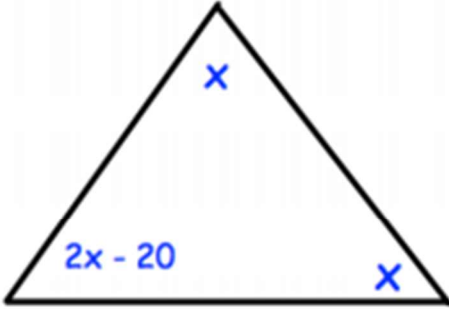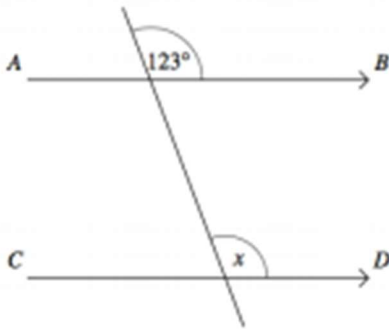
Answers: https://corbettmaths.files.wordpress.com/2013/07/jan-1-pdf.pdf (page 2)

https://corbettmaths.files.wordpress.com/2013/07/jan-2-pdf1.pdf (page 2)

Solve the inequality $3x + 2 \leqslant 8$	
A car decreases in value 10% a year. If it was bought for £5000, how much will it be worth after 2 years?	
6cm 4cm	Calculate the length of the missing side
Simplify $t^6 \times t^2$	Simplify $\dfrac{m^8}{m^3}$
15 cm	Calculate the perimeter of this semi-circle.

January 1ˢᵗ – Foundation. Corbett maths 5-a-day

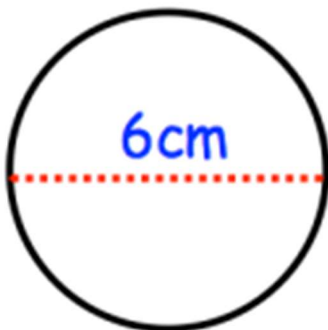|	
$\dfrac{3}{4} - \dfrac{1}{3}$	$\dfrac{3}{4} + \dfrac{4}{7}$

Find the value of x

What size is angle x?

Give a reason for your answer

n is an integer

$14 < 3n \leqslant 21$

Write down all the solutions

Calculate the circumference of this circle

January 2nd – Foundation. Corbett maths 5-a-day