

# Level 3 Certificate MATHEMATICAL STUDIES

June 2016

# Preliminary Material

To be opened and issued to candidates on Tuesday 1 March 2016

#### REMINDER TO CANDIDATES

YOU MUST **NOT** BRING THIS PRELIMINARY MATERIAL WITH YOU WHEN YOU SIT THE EXAMINATION.
A CLEAN COPY WILL BE MADE AVAILABLE.

#### **INFORMATION**

The Preliminary Material is to be seen by teachers and candidates **only**, for use during preparation for the examination on Wednesday 18 May 2016. It **cannot** be used by anyone else for any other purpose, other than as stated in the instructions issued, until after the examination date has passed. It must **not** be provided to third parties.

#### Income Tax and National Insurance 2015-2016

#### Income tax 2015-2016

Everyone in the UK has a personal allowance. This is their annual amount of tax-free income. The standard personal allowance for 2015–2016 was £10600

The rates of income tax you pay depend on how much **taxable income** you have above your personal allowance.

#### Income tax rates and taxable bands 2015-2016

Rate	Taxable Income
Basic: 20%	£0-£31785
Higher: 40%	£31786-£150000
Additional: 45%	Over £150 000

#### To calculate your income tax if your annual income is £100000 or less

Find your taxable income by subtracting your personal tax allowance from your annual gross income.

You pay income tax at 20% on the first £31785 of your taxable income.

You pay income tax at 40% on your taxable income over £31785

# National Insurance (NI) 2015-2016

Percentage NI Due	Minimum Weekly Income	Maximum Weekly Income	Minimum Monthly Income	Maximum Monthly Income	Minimum Yearly Income	Maximum Yearly Income
Nil		below £112		below £486		below £5832
0%	£112	£155	£486	£672	£5832	£8064
12%	£155.01	£815	£672.01	£3532	£8064.01	£42385
2%	above £815		above £3532		above £42385	

#### **Examples**

A person who had a weekly income of £350 a week paid 12% on the amount above £155

A person who had a weekly income of £950 paid 12% on the amount between £155.01 and £815 plus 2% of the amount above £815

#### **Gross pay**

Your gross pay is your wage or salary before any deductions are made.

#### Net pay

Your net pay (or take-home pay) is the amount of money you receive after income tax, National Insurance and other deductions have been taken off your gross pay.

#### **Student Loans**

The Student Loans Company (SLC) gives loans to students at university.

There are two types of repayment plan for student loans.

If you started your course before 1 September 2012 you will be on **repayment plan 1**If you started your course on or after 1 September 2012 you will be on **repayment plan 2** 

#### Repayment plan 1

You only start making repayments when your gross income is over the threshold of £17335 a year. You pay 9% of anything you earn over the threshold.

#### Repayment plan 2

You only start making repayments when your gross income is over the threshold of £21000 a year. You pay 9% of anything you earn over the threshold.

For either plan you can also make additional voluntary repayments to SLC at any time which will reduce your balance earlier.

# Water

# How much water does an 'average' person/household use?

Our household water is pumped from reservoirs to our homes.

Water authorities must ensure that there is always a sufficient supply of water to households.

The table below gives a guide to average water use based on the number of people living in a household.

Number of people living in a household	Annual water usage (cubic metres)
1	54
2	101
3	134
4	164
5	191
6	216

One cubic metre = 1000 litres

#### END OF PRELIMINARY MATERIAL

There is no preliminary material printed on this page

There is no preliminary material printed on this page

### There is no preliminary material printed on this page

#### Copyright information

For confidentiality purposes, from the November 2015 examination series, acknowledgements of third party copyright material will be published in a separate booklet rather than including them on the examination paper or support materials. This booklet is published after each examination series and is available for free download from www.aqa.org.uk after the live examination series.

Permission to reproduce all copyright material has been applied for. In some cases, efforts to contact copyright-holders may have been unsuccessful and AQA will be happy to rectify any omissions of acknowledgements. If you have any queries please contact the Copyright Team, AQA, Stag Hill House, Guildford, GU2 7XJ.

Copyright © 2016 AQA and its licensors. All rights reserved.