

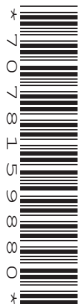


Oxford Cambridge and RSA

Level 3 Certificate
Quantitative Problem Solving (MEI)
H867/01 Introduction to Quantitative Reasoning

Insert

Wednesday 16 May 2018 – Morning



NOTES FOR GUIDANCE (CANDIDATES)

- This insert contains a copy of the pre-release material for use with the question paper.
- This document consists of **4** pages.

INSTRUCTION TO EXAMS OFFICER/INVIGILATOR

- Do not send this Insert for marking; it should be retained in the centre or recycled.
Please contact OCR Copyright should you wish to re-use this document.

Determining the age of a foetus

When women are pregnant it is very important to find the expected date of birth (which is normally estimated as 40 weeks after conception). To do this a variety of methods can be used to find the age of a foetus. For example:

- calculations based upon a woman's menstrual cycles,
- tests of hormones found in a pregnant woman's urine,
- measurements of the foetus made using ultrasound.

Credit card commission

When credit cards are used abroad a commission is charged. For example, if the commission charged was 2% then something which costs \$100 in a shop would have a charge of \$102 debited from the credit card. This would then have to be converted into pounds before the credit card bill is paid.

Measuring speed and acceleration

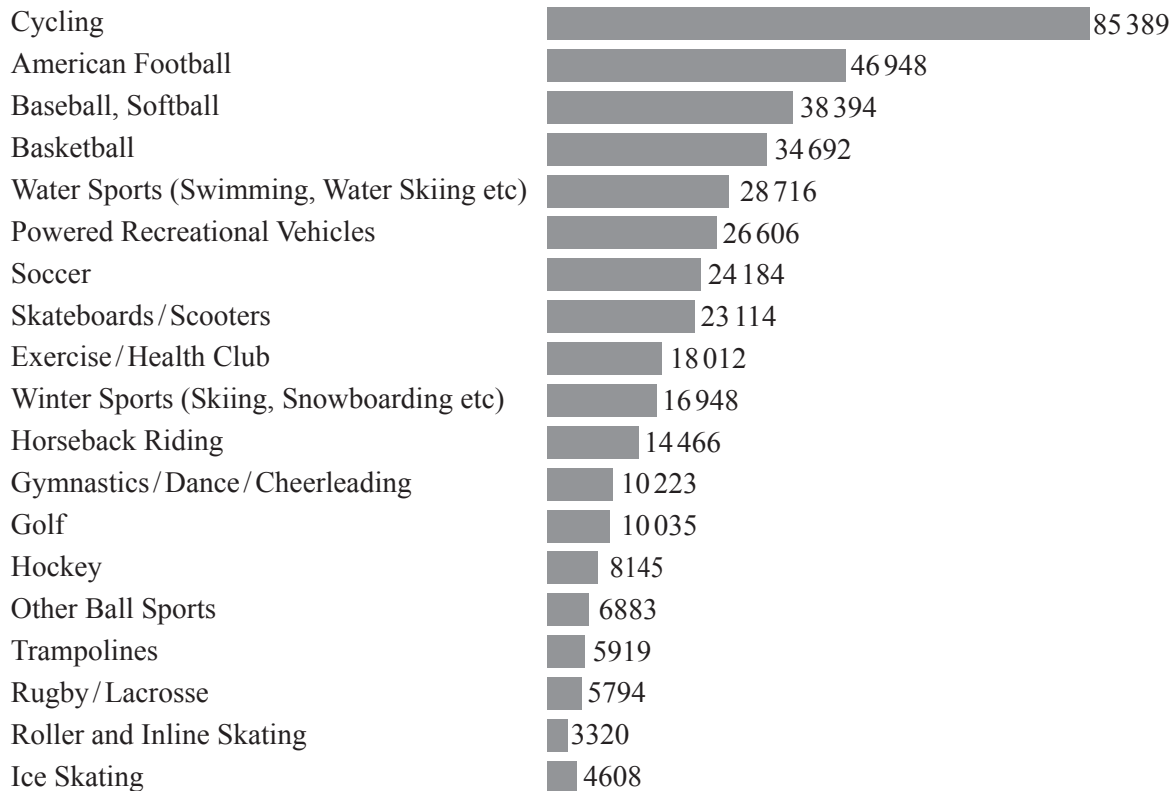
Speed can be measured using units such as mph, metres per second, km h^{-1} or km/minute.

Acceleration (and deceleration) is measured in units such as ms^{-2} or kilometres/hour².

Head injuries in the USA

The graph below shows the number of admissions to the Emergency Room (Accident and Emergency department) for head injuries sustained while playing sport in the USA in 2011.

Number of admissions to Emergency Room for head injuries



Source: The Guardian Newspaper

**Copyright Information**

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, First Floor, 9 Hills Road, Cambridge CB2 1GE.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.