



Free-Standing Mathematics Qualification
Higher Level
June 2015

Shape and Space

4985/PM

Unit 5

Preliminary Material

Data Sheet

To be opened and issued to candidates between
Friday 24 April 2015 and Friday 8 May 2015

REMINDER TO CANDIDATES

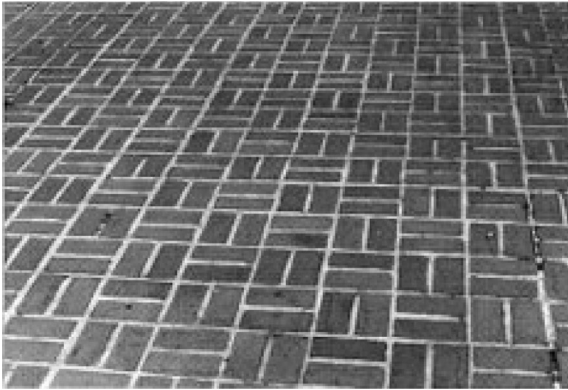
YOU MUST **NOT** BRING THIS DATA SHEET
WITH YOU WHEN YOU SIT THE EXAMINATION.
A CLEAN COPY WILL BE MADE AVAILABLE.

INFORMATION

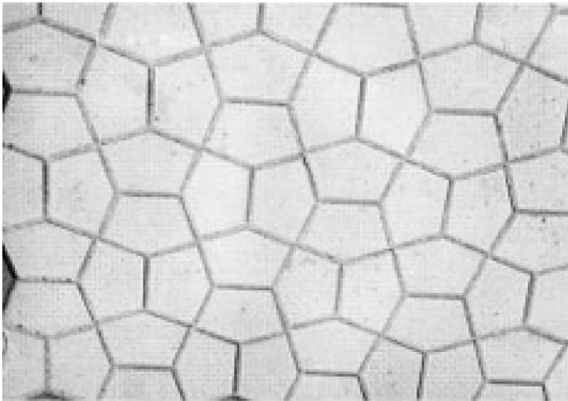
The Preliminary Material is to be seen by teachers and candidates **only**, for use during preparation for the examination on Friday 15 May 2015. It **cannot** be used by anyone else for any other purpose, other than as stated in the instructions issued, until after the examination date has passed. It must **not** be provided to third parties.

Paving tiles

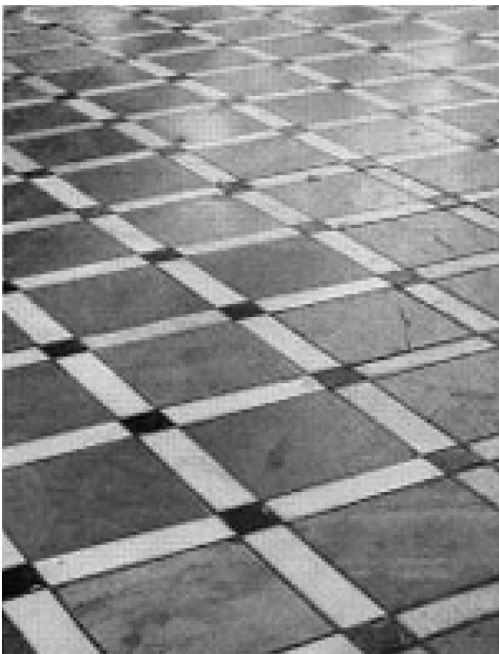
Patterns of tiles show different kinds of symmetry.



Paving pattern in Annapolis, Maryland, USA



Street pavement in Japan



Pavement in Jaen, Spain

Recording studio

A large recording studio may have several rooms. For example, there may be a control room and a recording room.

Some of these rooms may need furniture and soundproofing.

**Cutting fabric**

A person cutting fabric to make an item of clothing can use a template to help them cut accurately.



Turn over ►

Racing cars

Racing cars need special tyres because they have to turn, accelerate and brake at high speeds.

A car's average speed in miles per hour is the number of miles the car travels in one hour.

It can also be calculated from the formula

$$\text{Average speed in miles per hour} = \frac{\text{distance in miles}}{\text{time in hours}}$$



END OF DATA SHEET

Acknowledgement of copyright-holders and publishers

Paving tiles: I. Hargittai, M. Hargittai, Symmetry: A Unifying Concept, Shelter Publications, Bolinas, CA, 1994, pp. 174 and 176

Recording studio: © Getty Images

Cutting fabric: © Getty Images

Racing cars: © Getty Images

Copyright © 2015 AQA and its licensors. All rights reserved.

P/Jun15/4985/PM