



**Advanced Mathematics
Support Programme®**

Checking Proof

Let a and b be two non-zero numbers such that $a = b$

$$a = b$$

Multiply both sides by a

$$a^2 = ab$$

Subtract b^2 from both sides

$$a^2 - b^2 = ab - b^2$$

Factorise

$$(a + b)(a - b) = b(a - b)$$

Divide both sides by $(a - b)$

$$a + b = b$$

But $a = b$ so

$$2b = b$$

Divide both sides by b

$$2 = 1$$

About the AMSP

- A government-funded initiative, managed by MEI, providing national support for teachers and students in all state-funded schools and colleges in England.
- It aims to increase participation in AS/A level Mathematics and Further Mathematics, and Core Maths, and improve the teaching of these qualifications.
- Additional support is given to those in priority areas to boost social mobility so that, whatever their gender, background or location, students can choose their best maths pathway post-16, and have access to high quality maths teaching.

Contact the AMSP



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