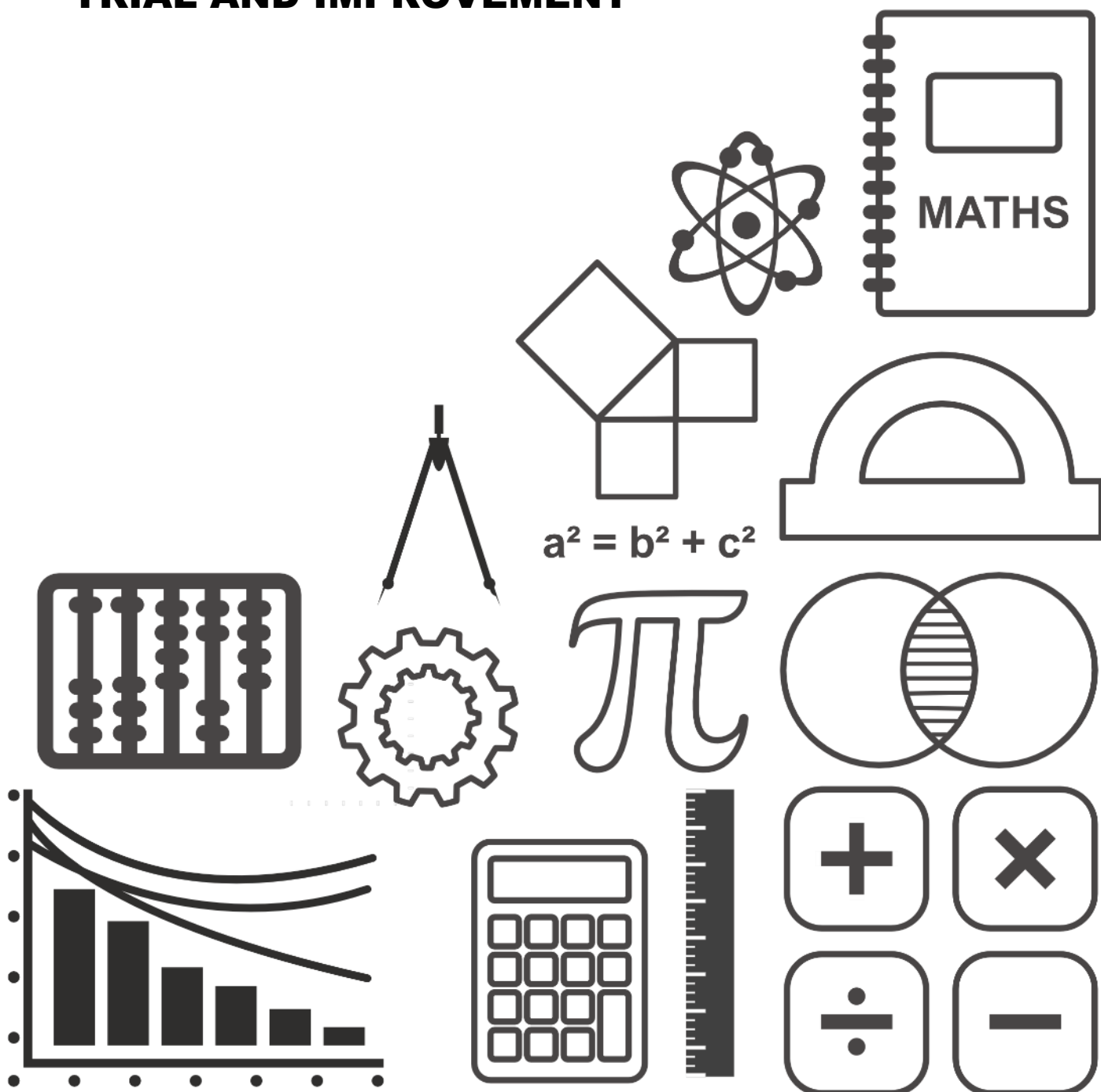


MATHSDIY

GCSE TOPIC BOOKLET TRIAL AND IMPROVEMENT



1. A solution to the equation

$$x^3 + 2x = 7$$

lies between 1 and 2. Use the method of trial and improvement to find this solution correct to one decimal place.

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2. A solution to the equation

$$x^3 + 6x - 60 = 0$$

lies between 3 and 4. Use the method of trial and improvement to find this solution correct to one decimal place.

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3. A solution to the equation

$$x^3 + 5x - 30 = 0$$

lies between 2 and 3. Use the method of trial and improvement to find this solution correct to one decimal place.

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4. A solution to the equation

$$2x^3 - 3x - 17 = 0$$

lies between 2 and 3. Use the method of trial and improvement to find this solution correct to one decimal place.

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5. A solution to the equation

$$x^3 - 6x - 3 = 0$$

lies between 2.6 and 2.7. Use the method of trial and improvement to find this solution correct to two decimal places.

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6. A solution to the equation

$$x^3 - 5x + 2 = 0$$

lies between 0.4 and 0.5. Use the method of trial and improvement to find this solution correct to two decimal places.

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7. A solution to the equation

$$x^3 - 5x - 66 = 0$$

lies between 4.4 and 4.5. Use the method of trial and improvement to find this solution correct to two decimal places.

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8. A solution of the equation

$$x^3 + 3x - 50 = 0$$

lies between 3.4 and 3.5. Use the method of trial and improvement to find this solution correct to two decimal places.

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9. The length of the rectangle below is 2cm longer than the width.

The area of the rectangle is 70 cm^2 .

Use the method of trial and improvement to find the width, correct to one decimal place.



Diagram not drawn to scale

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