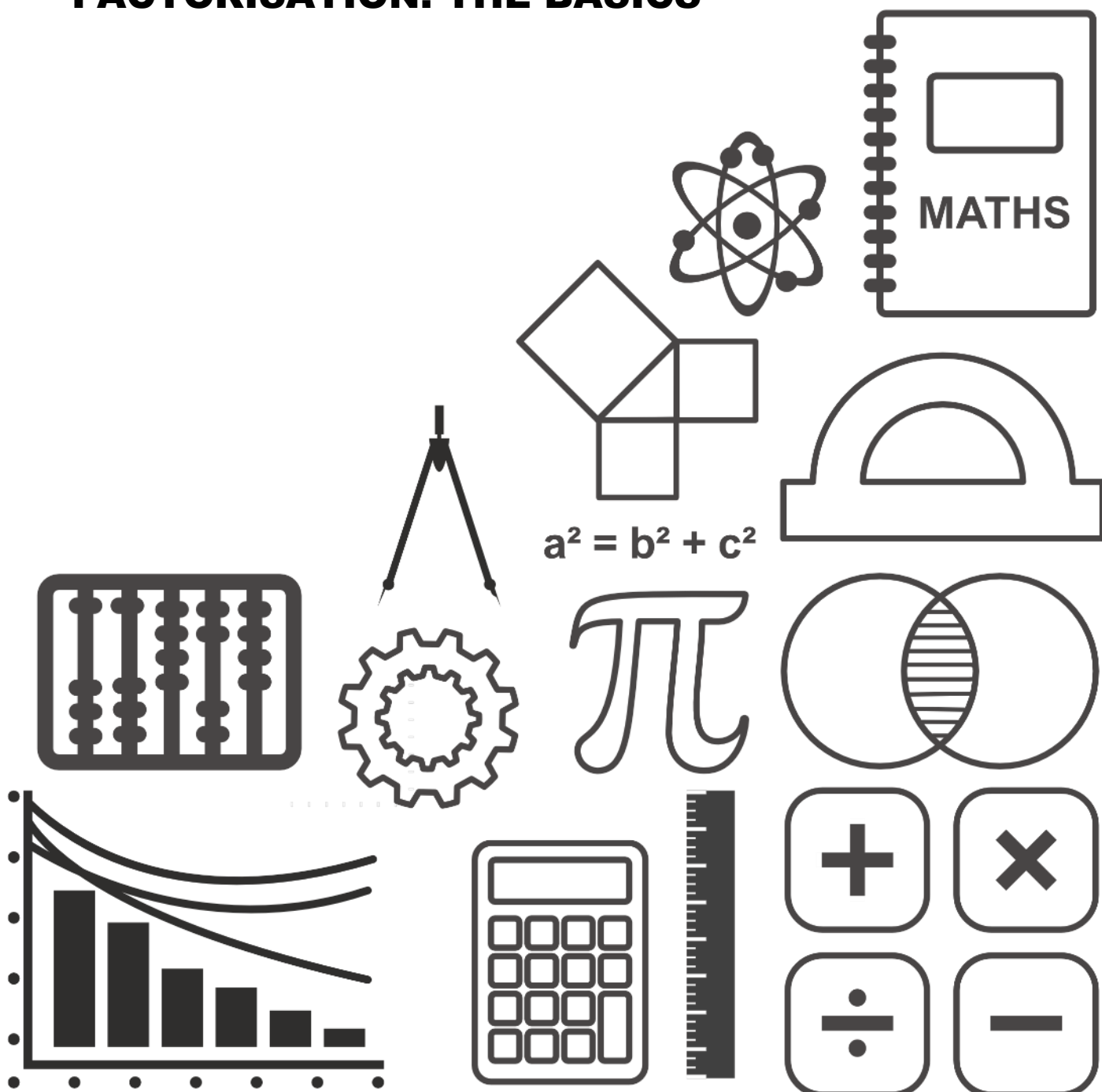


MATHSDIY

GCSE TOPIC BOOKLET FACTORISATION: THE BASICS



1. Complete these statements.

- a) $6x + 8y = 2(3x + \quad)$ (1)
- b) $9x - 6y = 3(3x - \quad)$ (1)
- c) $10a + 8b = 2(5a + \quad)$ (1)
- d) $4x - 20y = 4(x - \quad)$ (1)
- e) $18x - 9y = 9(\quad - y)$ (1)
- f) $16x + 8y + 4z = 4(4x + 2y + \quad)$ (1)
- g) $27c + 81d = 27(c + \quad)$ (1)
- h) $15s + 35t = 5(\quad + 7t)$ (1)
- i) $24m - 40n = 8(\quad - \quad)$ (1)
- j) $2xy + 8y^2 = 2y(\quad + \quad)$ (1)

2. Factorise the following expressions.

- a) $8x + 10y$ (1)
- b) $27x - 15y$ (1)
- c) $3x + 12y + 6z$ (1)
- d) $8x - 10y + 40z$ (1)
- e) $35u - 21v$ (1)
- f) $12s - 18t$ (1)
- g) $8x^2 + 16y^2$ (1)
- h) $27a + 63b - 18c$ (1)
- i) $3x^2 - 9y^2 - 15z^2$ (1)

3. Factorise $3a^2 - 6a$
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(2)

4. Factorise $4x^2 - 6x$
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(2)

5. Factorise $3y^2 - 9y$
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(2)

6. Factorise $8x^2 - 16x$
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.....
(2)

7. Factorise $2b^2 - 6b$
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.....
(2)

8. Factorise $14y + 7y^2$
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(2)

9. Factorise $3a^3 - 6a^2$

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(2)

10. Factorise $4x^2 - 16y^2 - 8z^2$

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(2)

11. Factorise $3ay^2 - 6ay - 9a^2$

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(2)

12. Factorise $15x^2y - 9xyz - 6xy^2$

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(2)

13. Factorise $2m^2n + 6a^2n$

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(2)

14. Factorise $40x^2 - 60y^2 - 30z^2$

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(2)