INKMATHS FLASHCARDS

Further Maths core results

12 cards · fronts and backs

Print double-sided, flipping on the long edge, and each answer lands behind its question. Cut along the card borders.

Definitions in precise wording, the standard results the formulae booklet does not print, a check-yourself question per topic, and the slips that lose marks. The same cards run on the website with spaced-repetition scheduling, at inkmaths.co.uk/flashcards.

STANDARD RESULT

De Moivre's theorem:

$(\cos\theta + i\sin\theta)^n = ?$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Multiplying complex numbers:

$|zw| = ?$, $\arg(zw) = ?$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

2 × 2 determinant:

rows (a, b), (c, d): det = ?

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Cubic root relations:

$az^3 + bz^2 + cz + d = 0$: $\alpha + \beta + \gamma = ?$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Standard result:

$\Sigma r^2 = ?$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Volume of revolution:

V = ? (about the x-axis)

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Definition:

$\cosh x = ?$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Hyperbolic identity:

$\cosh^2 x - \sinh^2 x = ?$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$|zw| = |z||w|, \arg(zw) = \arg z + \arg w$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$(\cos\theta + i\sin\theta)^n = \cos n\theta + i\sin n\theta$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$\alpha + \beta + \gamma = -(b)/(a)$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$\det = ad - bc$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$V = \pi \int y^2 \, dx$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$\Sigma r^2 = (n(n+1)(2n+1))/(6)$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$\cosh^2 x - \sinh^2 x = 1$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$\cosh x = (e^x + e^{-x})/(2)$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Logarithmic form:

arsinh x = ?

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Polar area:

A = ?

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Integrating factor:

(dy)/(dx) + P(x)y = Q(x): IF = ?

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

Second order equations:

ay'' + by' + cy = 0: auxiliary equation?

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$A = (1)/(2)\int r^2\,d\theta$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$\operatorname{arsinh} x = \ln(x + \sqrt{(x^2 + 1)})$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$am^2 + bm + c = 0$

FURTHER MATHS: CORE RESULTS

STANDARD RESULT

$IF = e^{\int P\,dx}$

FURTHER MATHS: CORE RESULTS