

A-Level Further Mathematics

Glossary · · every term in the course, A–Z

English	Pinyin
 angular speed <i>/ˈæŋɡjʊlə spiːd/</i>	jiǎo sù dù
 arc length <i>/ɑːk leŋθ/</i>	hú zhǎng
= auxiliary equation <i>/ɔːkˈsɪliəri iˈkweɪzn/</i>	fǔ zhù fāng chéng
 bounding parabola <i>/ˈbaʊndɪŋ pəˈræbələ/</i>	bāo luò pāo wù xiàn
+ Cartesian coordinates <i>/kɑːˈtiːziən kəʊˈɔːdɪnəts/</i>	zhí jiǎo zuò biāo
+ Cartesian equation <i>/kɑːˈtiːziən iˈkweɪzn/</i>	zhí jiǎo zuò biāo fāng chéng
 centre of mass <i>/ˈsentə ɒv mæs/</i>	zhì xīn
 centripetal acceleration <i>/senˈtrɪpɪtl əkˈseləˈreɪʃn/</i>	xiàng xīn jiā sù dù
 characteristic equation <i>/ˌkærɪktəˈrɪstɪk iˈkweɪzn/</i>	tè zhēng fāng chéng
× chi-squared test <i>/kaɪ skweəd test/</i>	kǎ fāng jiǎn yàn
% coefficient of restitution <i>/ˌkəʊɪˈfɪʃənt ɒv rɪstɪˈtjuːʃn/</i>	huī fù xì shù
× coefficients <i>/ˌkəʊɪˈfɪʃənts/</i>	xì shù
 complementary function <i>/ˌkɒmplɪˈmentəri ˈfʌŋkʃn/</i>	yú hán shù
 completing the square <i>/kəmˈpliːtɪŋ ðə skweə/</i>	pèi fāng fǎ
 complex number <i>/ˈkɒmpleks ˈnʌmbə/</i>	fù shù
[] confidence interval <i>/ˈkɒnfɪdəns ˈɪntəvl/</i>	zhì xìn qū jiān
 conical pendulum <i>/ˈkɒnɪkl ˈpendjʊləm/</i>	yuán zhuī bǎi
 conjecture <i>/kənˈdʒektʃə/</i>	cāi xiǎng

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 conservation of momentum <i>/ˌkɒnsə'veɪʃn ɒv məʊ'mentəm/</i>	dòng liàng shǒu héng
 constant acceleration <i>/'kɒnstənt ək'selə'reɪʃn/</i>	yún jiā sù
 contingency table <i>/kən'tɪndʒənsi 'teɪbl/</i>	liè lián biǎo
 convergent <i>/kən'vɜːdʒənt/</i>	shōu liǎn
 coplanar forces <i>/ˌkəʊ'pleɪnə 'fɔːsɪz/</i>	gòng miàn lì
 cumulative distribution function <i>/'kjuːmjələtɪv ˌdɪstrɪ'bjuːʃn 'fʌŋkʃn/</i>	lěi jī fēn bù hán shù
 de Moivre's theorem <i>/də 'mɔɪvəz 'θɪərəm/</i>	dì mò fú dìng lǐ
 degrees of freedom <i>/di'grɪːz ɒv 'friːdəm/</i>	zì yóu dù
 determinant <i>/di'tɜːmɪnənt/</i>	háng liè shì
 diagonal matrix <i>/daɪ'æɡənəl 'meɪtrɪks/</i>	duì jiǎo jǔ zhèn
 differential equation <i>/ˌdɪfə'renʃl ɪ'kweɪʃn/</i>	wēi fēn fāng chéng
 discriminant <i>/di'skrɪmɪnənt/</i>	pàn bié shì
 eigenvalues <i>/'aɪdʒən væljuz/</i>	tè zhēng zhí
 eigenvector <i>/'aɪdʒənvektə/</i>	tè zhēng xiàng liàng
 elastic potential energy <i>/ɪ'læstɪk pə'tenʃl ɪ'nədʒi/</i>	tán xìng shì néng
 enlargement <i>/en'laːdʒmənt/</i>	fàng dà
 equilibrium <i>/ˌiːkwɪ'libriəm/</i>	píng héng
 Further Mechanics <i>/'fɜːðə mɪ'kænɪks/</i>	jìn jiē lì xué
 Further Probability & Statistics <i>/'fɜːðə ˌprɒbə'bɪlɪtɪ ænd stə'tɪstɪks/</i>	jìn jiē gài lǜ tǒng jì

English	Pinyin
Σ Further Pure Mathematics <i>/ˈfɜːðə ˈpjʊə ˌmæθɪˈmætɪks/</i>	jìn jiē chún shù xué
* general solution <i>/ˈdʒenərəl səˈluːʃn/</i>	tōng jiě
 geometric transformation <i>/ˌdʒiːəvˈmetrɪk trænʃɔːˈmeɪʃn/</i>	jǐ hé biàn huàn
✓✓ goodness of fit <i>/ˈɡʊdnəs ɒv fɪt/</i>	nǐ hé yōu dù
 Hooke's law <i>/hʊks lɔː/</i>	hú kè dīng lǚ
○ horizontal circle <i>/ˌhɒrɪˈzɒntl ˈsɜːkl/</i>	shuǐ píng yuán
 hyperbolic functions <i>/ˌhaɪpəˈbɒlɪk ˈfʌŋkʃnz/</i>	shuāng qū hán shù
 hypothesis test <i>/haɪˈpɒθəsis test/</i>	jiǎ shè jiǎn yàn
 identity matrix <i>/aɪˈdentɪti ˈmeɪtrɪks/</i>	dān wèi jǔ zhèn
 independence <i>/ˌɪndɪˈpendəns/</i>	dú lì xìng
✓✓ inductive proof <i>/ɪnˈdʌktɪv pruːf/</i>	guī nà zhèng míng
* integrating factor <i>/ˈɪntɪɡreɪtɪŋ ˈfæktə/</i>	jī fēn yīn zi
— invariant lines <i>/ɪnˈveəriənt laɪnz/</i>	bù biàn zhí xiàn
• invariant points <i>/ɪnˈveəriənt pɔɪnts/</i>	bù biàn diǎn
 inverse hyperbolic functions <i>/ɪnˈvɜːs ˌhaɪpəˈbɒlɪk ˈfʌŋkʃnz/</i>	fǎn shuāng qū hán shù
 inverse matrix <i>/ɪnˈvɜːs ˈmeɪtrɪks/</i>	nì jǔ zhèn
 lamina <i>/ˈlæmɪnə/</i>	báo piàn
x^2 logarithmic form <i>/ˌlɒɡəˈrɪθmɪk fɔːm/</i>	duì shù xíng shì
Σ Maclaurin's series <i>/məˈklɔːrɪnz ˈsɪəriːz/</i>	mài kè láo lín jí shù

English	Pinyin
 mathematical induction <i>/ˌmæθəˈmætɪkl ɪnˈdʌkʃn/</i>	shù xué guī nà fǎ
 matrix <i>/ˈmeɪtrɪks/</i>	jǔ zhèn
 matrix equation <i>/ˈmeɪtrɪks ɪˈkweɪʒn/</i>	jǔ zhèn fāng chéng
 median <i>/ˈmiːdiːən/</i>	zhōng wèi shù
 method of differences <i>/ˈmeθəd ɒv ˈdɪfrənsɪz/</i>	chā fēn fǎ
 modulus of elasticity <i>/ˈmɒdjuːləs ɒv ɪləˈstɪsɪti/</i>	tán xìng mó liàng
 moment <i>/ˈməʊmənt/</i>	lì jǔ
 Newton's experimental law <i>/ˈnjuːtnz ɛkˌsperiˈmentl lɔː/</i>	niú dùn shí yàn dìng lǚ
 non-parametric test <i>/nɒn ˌpærəˈmetrɪk test/</i>	fēi cān shù jiǎn yàn
 normal contact force <i>/ˈnɔːml ˈkɒntækt fɔːs/</i>	fǎ xiàng jiē chù lì
 oblique asymptote <i>/əˈbliːk ˈæsɪmptəʊt/</i>	xié jiàn jìn xiàn
 oblique impact <i>/əˈbliːk ˈɪmpækt/</i>	xié pèng zhuàng
 partial fractions <i>/ˈpɑːʃl ˈfrækʃnz/</i>	bù fēn fēn shì
 particular integral <i>/pəˈtɪkjələ ˈɪntɪgrəl/</i>	tè jī fēn
 particular solution <i>/pəˈtɪkjələ səˈluːʃn/</i>	tè jiě
 percentiles <i>/pəˈsentailz/</i>	bǎi fēn wèi shù
 plane <i>/pleɪn/</i>	píng miàn
 polar coordinates <i>/ˈpəʊlə kəʊˈɔːdɪnəts/</i>	jí zuò biāo
 polar curves <i>/ˈpəʊlə kɜːvz/</i>	jí zuò biāo qū xiàn
 pooled estimate <i>/puːld ˈestɪmət/</i>	hé bìng gū jì

English	Pinyin
 probability density function <i>/ˌprɒbəˈbɪlɪti ˈdensɪti ˈfʌŋkʃn/</i>	gài lǚ mì dù hán shù
 probability generating function <i>/ˌprɒbəˈbɪlɪti ˈdʒenəreɪtɪŋ ˈfʌŋkʃn/</i>	gài lǚ mǔ hán shù
 projectile <i>/prəˈdʒektail/</i>	pāo shè tǐ
 rational function <i>/ˈræʃənl ˈfʌŋkʃn/</i>	yǒu lǐ hán shù
 reduction formula <i>/rɪˈdʌkʃn ˈfɔːmjʊlə/</i>	dì tuī gōng shì
 reflection <i>/rɪˈflekʃn/</i>	fǎn shè
 Riemann sum <i>/ˈriːmən sʌm/</i>	lí màn hé
 roots <i>/ruːts/</i>	gēn
 roots of unity <i>/ruːts ɒv ˈjuːnɪti/</i>	dān wèi gēn
 rotation <i>/rəʊˈteɪʃn/</i>	xuán zhuǎn
 separable variables <i>/ˈsepərəbl ˈveəriəblz/</i>	kě fēn lí biàn liàng
 shear <i>/ʃiə/</i>	qiē biàn
 sign test <i>/saɪn test/</i>	fú hào jiǎn yàn
 singular matrix <i>/ˈsɪŋɡjʊlə ˈmeɪtrɪks/</i>	qí yì jǔ zhèn
 skew lines <i>/skjuː laɪnz/</i>	yì miàn zhí xiàn
 sliding <i>/ˈslaɪdɪŋ/</i>	huá dòng
 stretch <i>/stretʃ/</i>	lā shēn
 substitution <i>/ˌsʌbstɪˈtjuːʃn/</i>	dài huàn
 sum to infinity <i>/sʌm tu ɪnˈfɪnɪti/</i>	wú qióng hé

English	Pinyin
 surface area of revolution <i>/ˈsɜːfɪs ˈeəriə ɒv ˌrevəˈluːʃn/</i>	xuán zhuǎn qū miàn miàn jī
 symmetric functions <i>/sɪˈmetrɪk ˈfʌŋkʃnz/</i>	duì chèn hán shù
 symmetry <i>/ˈsɪmətri/</i>	duì chèn
 theoretical distribution <i>/θɪəˈretɪkl ˌdɪstrɪˈbjʊːʃn/</i>	lǐ lùn fēn bù
 toppling <i>/ˈtɒplɪŋ/</i>	fān dǎo
 trajectory <i>/trəˈdʒektəri/</i>	guǐ jì
 turning points <i>/ˈtɜːnɪŋ poɪnts/</i>	zhù diǎn
 variable force <i>/ˈveəriəbl fɔːs/</i>	biàn lì
 vector product <i>/ˈvektə ˈprɒdʌkt/</i>	xiàng liàng jī
 vectors <i>/ˈvektəz/</i>	xiàng liàng
 vertical circle <i>/ˈvɜːtɪkl ˈsɜːkl/</i>	shù zhí yuán
 Wilcoxon rank-sum test <i>/ˈwɪlkɒksn ræŋk sʌm test/</i>	wēi ěr kē kè sēn zhì hé jiǎn yàn
 Wilcoxon signed-rank test <i>/ˈwɪlkɒksn saɪnd ræŋk test/</i>	wēi ěr kē kè sēn fú hào zhì jiǎn yàn
 zero matrix <i>/ˈziərəʊ ˈmeɪtrɪks/</i>	líng jǔ zhèn