T1 Further Pure Mathematics	T1 roots	T1 substitution
T1 rational function	T1 oblique asymptote	T1 method of differences
T1 convergent	T1 sum to infinity	T1 matrix

T1 代换 dài huàn	T1 根 gēn	T1 进阶纯数学 jìn jiē chún shù xué
T1 差分法 chā fēn fǎ	T1 斜渐近线 xié jiàn jìn xiàn	T1 有理函数 yǒu lǐ hán shù
T1 矩阵 jǔ zhèn	T1 无穷和 wú qióng hé	T1 收敛 shōu liǎn

T1 zero matrix	T1 identity matrix	T1 determinant
T1 singular matrix	T1 inverse matrix	T1 geometric transformation
T1 invariant points	T1 invariant lines	T1 polar coordinates

T1

行列式

háng liè shì

T1

单位矩阵

dān wèi jǔ zhèn

T1

零矩阵

líng jǔ zhèn

T1

几何变换

jǐ hé biàn huàn

T1

逆矩阵

nì jǔ zhèn

T1

奇异矩阵

qí yì jǔ zhèn

T1

极坐标

jí zuò biāo

T1

不变直线

bù biàn zhí xiàn

T1

不变点

bù biàn diǎn

T1 Cartesian coordinates	T1 polar curves	T1 plane
T1 vector product	T1 vectors	T1 skew lines
T1 mathematical induction	T1 conjecture	T1 inductive proof

T1 平面 píng miàn	T1 极坐标曲线 jí zuò biāo qū xiàn	T1 直角坐标 zhí jiǎo zuò biāo
T1 异面直线 yì miàn zhí xiàn	T1 向量 xiàng liàng	T1 向量积 xiàng liàng jī
T1 归纳证明 guī nà zhèng míng	T1 猜想 cāi xiǎng	T1 数学归纳法 shù xué guī nà fǎ

T1 symmetric functions	T1 discriminant	T1 turning points
T1 partial fractions	T1 rotation	T1 reflection
T1 enlargement	T1 stretch	T1 shear

T1 极值点 jí zhí diǎn	T1 判别式 pàn bié shì	T1 对称函数 duì chèn hán shù
T1 反射 fǎn shè	T1 旋转 xuán zhuǎn	T1 部分分式 bù fèn fēn shì
T1 切变 qiē biàn	T1 拉伸 lā shēn	T1 放大 fàng dà

T1 quartic equation	T1 polynomial	T1 vertical asymptote
T1 denominator	T1 quotient	T1 remainder
T1 summation	T1 telescope	T1 minor

T1

垂直渐近线

chuí zhí jiàn jìn xiàn

T1

多项式

duō xiàng shì

T1

四次方程

sì cì fāng chéng

T1

余数

yú shù

T1

商

shāng

T1

分母

fēn mǔ

T1

余子式

yú zǐ shì

T1

裂项相消

liè xiàng xiāng xiāo

T1

求和

qiú hé

T1 cofactor	T1 rotational symmetry	T1 pole
T1 initial line	T1 cardioid	T1 sector
T1 normal vector	T1 perpendicular	T1 parallelogram

T1 极点 jí diǎn	T1 旋转对称 xuán zhuǎn duì chèn	T1 代数余子式 dài shù yú zǐ shì
T1 扇形 shàn xíng	T1 心脏线 xīn zàng xiàn	T1 极轴 jí zhóu
T1 平行四边形 píng xíng sì biān xíng	T1 垂直 chuí zhí	T1 法向量 fǎ xiàng liàng

T1 anti-commutative	T1 scalar product	T1 unit normal
T1 foot of a perpendicular	T1 common perpendicular	T1 positive integer
T1 base case	T1 inductive step	T1 divisible

T1 单位法向量 dān wèi fǎ xiàng liàng	T1 数量积 shù liàng jī	T1 反交换 fǎn jiāo huàn
T1 正整数 zhèng zhěng shù	T1 公垂线 gōng chuí xiàn	T1 垂足 chuí zú
T1 整除 zhěng chú	T1 归纳步骤 guī nà bù zhòu	T1 基础情形 jī chǔ qíng xíng

T1 inductive hypothesis	T1 factorial	T2 Further Pure Mathematics
T2 hyperbolic functions	T2 inverse hyperbolic functions	T2 logarithmic form
T2 matrix equation	T2 characteristic equation	T2 eigenvalues

T2 进阶纯数学 jìn jiē chún shù xué	T1 阶乘 jiē chéng	T1 归纳假设 guī nà jiǎ shè
T2 对数形式 duì shù xíng shì	T2 反双曲函数 fǎn shuāng qū hán shù	T2 双曲函数 shuāng qū hán shù
T2 特征值 tè zhēng zhí	T2 特征方程 tè zhēng fāng chéng	T2 矩阵方程 jǔ zhèn fāng chéng

T2 eigenvector	T2 diagonal matrix	T2 Maclaurin's series
T2 completing the square	T2 reduction formula	T2 arc length
T2 surface area of revolution	T2 Riemann sum	T2 complex number

T2

麦克劳林级数

mài kè láo lín jí shù

T2

对角矩阵

duì jiǎo jǔ zhèn

T2

特征向量

tè zhēng xiàng liàng

T2

弧长

hú cháng

T2

递推公式

dì tuī gōng shì

T2

配方法

pèi fāng fǎ

T2

复数

fù shù

T2

黎曼和

lí màn hé

T2

旋转曲面面积

xuán zhuǎn qū miàn miàn jī

T2 De Moivre's theorem	T2 roots of unity	T2 integrating factor
T2 general solution	T2 complementary function	T2 particular integral
T2 particular solution	T2 separable variables	T2 auxiliary equation

T2

积分因子

jī fēn yīn zi

T2

单位根

dān wèi gēn

T2

棣莫弗定理

dì mò fú dìng lǐ

T2

特积分

tè jī fēn

T2

余函数

yú hán shù

T2

通解

tōng jiě

T2

辅助方程

fǔ zhù fāng chéng

T2

可分离变量

kě fēn lí biàn liàng

T2

特解

tè jiě

T2 catenary	T2 exponential	T2 reciprocal
T2 identity	T2 domain	T2 range
T2 even function	T2 odd function	T2 asymptote

T2 倒数 dào shù	T2 指数 zhǐ shù	T2 悬链线 xuán liàn xiàn
T2 值域 zhí yù	T2 定义域 dìng yì yù	T2 恒等式 héng děng shì
T2 渐近线 jiàn jìn xiàn	T2 奇函数 jī hán shù	T2 偶函数 ǒu hán shù

T2 inverse function	T2 principal branch	T2 diagonalisation
T2 scalar	T2 stretch	T2 non-singular
T2 singular	T2 consistent	T2 inconsistent

T2

对角化

duì jiǎo huà

T2

主值分支

zhǔ zhí fēn zhī

T2

反函数

fǎn hán shù

T2

非奇异

fēi qí yì

T2

拉伸

lā shēn

T2

标量

biāo liàng

T2

不相容

bù xiāng róng

T2

相容

xiāng róng

T2

奇异

qí yì

T2 linearly independent	T2 Cayley–Hamilton theorem	T2 polynomial
T2 differentiation	T2 hyperbolic	T2 coefficient
T2 interval of convergence	T2 diverge	T2 chain rule

T2

多项式

duō xiàng shì

T2

凯莱 – 哈密顿定理

kǎi lái – hā mì dùn dìng lǐ

T2

线性无关

xiàn xìng wú guān

T2

系数

xì shù

T2

双曲

shuāng qū

T2

微分

wēi fēn

T2

链式法则

liàn shì fǎ zé

T2

发散

fā sàn

T2

收敛区间

shōu liǎn qū jiān

T2 implicit	T2 second derivative	T2 parametric
T2 antiderivative	T2 standard form	T2 substitution
T2 trigonometric	T2 surd	T2 polar form

T2

参数

cān shù

T2

二阶导数

èr jiē dǎo shù

T2

隐式

yǐn shì

T2

代换

dài huàn

T2

标准形式

biāo zhǔn xíng shì

T2

原函数

yuán hán shù

T2

极坐标形式

jí zuò biāo xíng shì

T2

根式

gēn shì

T2

三角

sān jiǎo

T2 argument	T2 modulus	T2 imaginary part
T2 unit circle	T2 mathematical induction	T2 primitive root of unity
T2 geometric series	T2 binomial expansion	T2 differential equation

T2

虚部

xū bù

T2

模

mó

T2

辐角

fú jiǎo

T2

本原单位根

běn yuán dān wèi gēn

T2

数学归纳法

shù xué guī nà fǎ

T2

单位圆

dān wèi yuán

T2

微分方程

wēi fēn fāng chéng

T2

二项式展开

èr xiàng shì zhǎn kāi

T2

等比级数

děng bǐ jí shù

T2 boundary condition	T2 initial condition	T2 function
T2 first-order linear equation	T2 resonance	T2 transient
T2 amplitude	T2 phase lag	T3 Further Mechanics

T2 函数 hán shù	T2 初始条件 chū shǐ tiáo jiàn	T2 边界条件 biān jiè tiáo jiàn
T2 暂态 zàn tài	T2 共振 gòng zhèn	T2 一阶线性方程 yī jiē xiàn xìng fāng chéng
T3 进阶力学 jìn jiē lì xué	T2 相位滞后 xiàng wèi zhì hòu	T2 振幅 zhèn fú

T3 elastic	T3 projectile	T3 horizontal
T3 vertical	T3 position	T3 speed
T3 gravity	T3 particle	T3 air resistance

T3

水平

shuǐ píng

T3

抛射体

pāo shè tǐ

T3

弹性

tán xìng

T3

速率

sù lǜ

T3

位置

wèi zhì

T3

竖直

shù zhí

T3

空气阻力

kōng qì zǔ lì

T3

质点

zhì diǎn

T3

重力

zhòng lì

T3 drag	T3 velocity	T3 displacement
T3 angle of projection	T3 velocity component	T3 constant acceleration
T3 greatest height	T3 range	T3 time of flight

T3 位移 wèi yí	T3 速度 sù dù	T3 阻力 zǔ lì
T3 匀加速 yún jiā sù	T3 速度分量 sù dù fēn liàng	T3 抛射角 pāo shè jiǎo
T3 飞行时间 fēi xíng shí jiān	T3 射程 shè chéng	T3 最大高度 zuì dà gāo dù

T3 trajectory	T3 Cartesian equation	T3 parabola
T3 collision	T3 equilibrium	T3 rigid body
T3 turning effect	T3 coplanar forces	T3 moment

T3

抛物线

pāo wù xiàn

T3

直角坐标方程

zhí jiǎo zuò biāo fāng chéng

T3

轨迹

guǐ jì

T3

刚体

gāng tǐ

T3

平衡

píng héng

T3

碰撞

pèng zhuàng

T3

力矩

lì jǔ

T3

共面力

gòng miàn lì

T3

转动效应

zhuǎn dòng xiào yìng

T3 line of action	T3 perpendicular distance	T3 perpendicular
T3 pivot	T3 separate	T3 resultant force
T3 parallel	T3 centre of mass	T3 uniform

T3 垂直 chuí zhí	T3 垂直距离 chuí zhí jù lí	T3 作用线 zuò yòng xiàn
T3 合力 hé lì	T3 分离 fēn lí	T3 支点 zhī diǎn
T3 均匀 jūn yún	T3 质心 zhì xīn	T3 并联 bìng lián

T3 symmetry	T3 density	T3 lamina
T3 median	T3 hemispherical shell	T3 circular arc
T3 circular sector	T3 composite body	T3 free-body diagram

T3 薄片 báo piàn	T3 密度 mì dù	T3 对称 duì chèn
T3 圆弧 yuán hú	T3 半球壳 bàn qiú ké	T3 中线 zhōng xiàn
T3 受力图 shòu lì tú	T3 复合物体 fù hé wù tǐ	T3 扇形 shàn xíng

T3 normal reaction	T3 friction	T3 sliding
T3 coefficient of friction	T3 limiting friction	T3 limiting equilibrium
T3 tension	T3 toppling	T3 base of support

T3

滑动

huá dòng

T3

摩擦力

mó cā lì

T3

法向反力

fǎ xiàng fǎn lì

T3

极限平衡

jí xiàn píng héng

T3

最大静摩擦

zuì dà jìng mó cā

T3

摩擦系数

mó cā xì shù

T3

支撑底面

zhī chēng dǐ miàn

T3

翻倒

fān dǎo

T3

张力

zhāng lì

T3 topple	T3 inertia	T3 centrifugal
T3 taut	T3 tangent	T3 angular speed
T3 linear speed	T3 period	T3 frequency

T3 离心 lí xīn	T3 惯性 guàn xìng	T3 倾倒 qīng dǎo
T3 角速度 jiǎo sù dù	T3 切线 qiè xiàn	T3 绷紧 bēng jǐn
T3 频率 pín lǜ	T3 周期 zhōu qī	T3 线速度 xiàn sù dù

T3 radial	T3 centripetal acceleration	T3 tangential
T3 vertical circle	T3 centripetal force	T3 horizontal circle
T3 conical pendulum	T3 work	T3 energy conservation

T3

切向

qiè xiàng

T3

向心加速度

xiàng xīn jiā sù dù

T3

径向

jìng xiàng

T3

水平圆

shuǐ píng yuán

T3

向心力

xiàng xīn lì

T3

竖直圆

shù zhí yuán

T3

能量守恒

néng liàng shǒu héng

T3

功

gōng

T3

圆锥摆

yuán zhuī bǎi

T3 slack	T3 turning point	T3 normal contact force
T3 loss of contact	T3 Hooke's law	T3 extension
T3 natural length	T3 modulus of elasticity	T3 stiffness

T3

法向接触力

fǎ xiàng jiē chù lì

T3

转折点

zhuǎn zhé diǎn

T3

松弛

sōng chí

T3

伸长量

shēn cháng liàng

T3

胡克定律

hú kè dìng lǜ

T3

脱离接触

tuō lí jiē chù

T3

劲度系数

jìn dù xì shù

T3

弹性模量

tán xìng mó liàng

T3

自然长度

zì rán cháng dù

T3 compression	T3 elastic potential energy	T3 kinetic energy
T3 series	T3 compress	T3 variable force
T3 differential equation	T3 chain rule	T3 separable differential equation

T3

动能

dòng néng

T3

弹性势能

tán xìng shì néng

T3

压缩

yā suō

T3

变力

biàn lì

T3

压缩

yā suō

T3

串联

chuàn lián

T3

可分离微分方程

kě fēn lí wēi fēn fāng chéng

T3

链式法则

liàn shì fǎ zé

T3

微分方程

wēi fēn fāng chéng

T3 separable	T3 integrate	T3 initial condition
T3 boundary condition	T3 terminal velocity	T3 partial fractions
T3 momentum	T3 linear momentum	T3 conservation of momentum

T3 初始条件 chū shǐ tiáo jiàn	T3 积分 jī fēn	T3 可分离 kě fēn lí
T3 部分分式 bù fèn fēn shì	T3 终端速度 zhōng duān sù dù	T3 边界条件 biān jiè tiáo jiàn
T3 动量守恒 dòng liàng shǒu héng	T3 线动量 xiàn dòng liàng	T3 动量 dòng liàng

T3 conservation of linear momentum	T3 line of impact	T3 line of centres
T3 direct impact	T3 oblique impact	T3 Newton's experimental law
T3 coefficient of restitution	T3 perfectly elastic	T3 inelastic

T3 球心连线 qiú xīn lián xiàn	T3 碰撞线 pèng zhuàng xiàn	T3 动量守恒 dòng liàng shǒu héng
T3 牛顿实验定律 niú dùn shí yàn dìng lǜ	T3 斜碰撞 xié pèng zhuàng	T3 正碰撞 zhèng pèng zhuàng
T3 非弹性 fēi tán xìng	T3 完全弹性 wán quán tán xìng	T3 恢复系数 huī fù xì shù

T3 perfectly inelastic	T3 reduced mass	T3 deflection
T3 fixed surface	T3 radian	T4 probability density function
T4 cumulative distribution function	T4 percentiles	T4 median

T3

偏转

piān zhuǎn

T3

约化质量

yuē huà zhì liàng

T3

完全非弹性

wán quán fēi tán xìng

T4

概率密度函数

gài lǜ mì dù hán shù

T3

弧度

hú dù

T3

固定表面

gù dìng biǎo miàn

T4

中位数

zhōng wèi shù

T4

百分位数

bǎi fēn wèi shù

T4

累积分布函数

lěi jī fēn bù hán shù

T4 hypothesis test	T4 confidence interval	T4 pooled estimate
T4 chi-squared test	T4 theoretical distribution	T4 degrees of freedom
T4 goodness of fit	T4 independence	T4 contingency table

T4

合并估计

hé bìng gū jì

T4

置信区间

zhì xìn qū jiān

T4

假设检验

jiǎ shè jiǎn yàn

T4

自由度

zì yóu dù

T4

理论分布

lǐ lùn fēn bù

T4

卡方检验

kǎ fāng jiǎn yàn

T4

列联表

liè lián biǎo

T4

独立性

dú lì xìng

T4

拟合优度

nǐ hé yōu dù

T4 non-parametric test	T4 sign test	T4 Wilcoxon signed-rank test
T4 Wilcoxon rank-sum test	T4 probability generating function	T4 Further Probability & Statistics

T4

威尔科克森符号秩检验

wēi ěr kē kè sēn fú hào zhì jiǎn yàn

T4

符号检验

fú hào jiǎn yàn

T4

非参数检验

fēi cān shù jiǎn yàn

T4

进阶概率统计

jìn jiē gài lǜ tǒng jì

T4

概率母函数

gài lǜ mǔ hán shù

T4

威尔科克森秩和检验

wēi ěr kē kè sēn zhì hé jiǎn yàn