Number

| Topics | Clip Number |  |  |  |
| :--- | :---: | :--- | :--- | :--- |
| Calculating with roots and fractional indices | $108,109,110$ |  |  |  |
| Surds: Definition and estimating | 111,112 |  |  |  |
| Surds: Simplifying, multiplying and dividing | $113,114,115$ |  |  |  |
| Surds: Expanding brackets | 116,117 |  |  |  |
| Surds: Rationalising the denominator | 118,119 |  |  |  |
| Best buys | 770 |  |  |  |

Algebra

| Topics | Clip Number |  |  |  |
| :--- | :---: | :--- | :--- | :--- |
| Expanding triple brackets | 166 |  |  |  |
| Expressions with algebraic fractions | 172 |  |  |  |
| Linear equations with algebraic fractions | 187 |  |  |  |
| Factorising quadratic expressions: ax ${ }^{2}+$ bx+c | $225,226,227,228$ |  |  |  |
| Quadratic expressions: Algebraic fractions | 229 |  |  |  |
| Quadratic expressions: Completing the square | $235,236,237$ |  |  |  |
| Quadratic equations: Factorising | $231,232,233$ |  |  |  |
| Quadratic equations: Quadratic formula | 241,242 |  |  |  |
| Quadratic equations: Completing the square | 238,239 |  |  |  |
| Quadratic equations: Algebraic fractions | 244 |  |  |  |
| Quadratic equations in context | 245 |  |  |  |
| Simultaneous equations: Quadratic/linear | 246 |  |  |  |
| Equation of a straight line: Perpendicular lines | 215,216 |  |  |  |
| $\begin{array}{l}\text { Quadratic graphs: Turning points and } \\ \text { discriminant }\end{array}$ | $256,243,258$ |  |  |  |
| $\begin{array}{l}\text { Simultaneous equations on graphs: Quadratic/ } \\ \text { linear }\end{array}$ | 259,260 |  |  |  |
| Exponential graphs | 302 |  |  |  |
| Trigonometric graphs | $303,304,305,306$ |  |  |  |
| Graph transformations | $307,308,309,310,311$, |  |  |  |
| Distance-time graphs | 312,313 |  |  |  |$)$

Algebra (continued)

| Topics | Clip Number |  |  |  |
| :--- | :---: | :--- | :--- | :--- |
| Circles and straight lines | $318,319,320$ |  |  |  |
| Linear inequalities as graph regions | $273,274,275,276$ |  |  |  |
| Quadratic inequalities | 277 |  |  |  |
| Function notation | 288,289 |  |  |  |
| Domain and range of functions | $290,291,292$ |  |  |  |
| Composite functions | 293,294 |  |  |  |
| Inverse functions | 295,296 |  |  |  |
| Functions: Problem solving | 297 |  |  |  |
| Other sequences: Recurrence relations | 262 |  |  |  |
| Quadratic sequences | $247,248,249,250$ |  |  |  |
| Trial and improvement* | 321 |  |  |  |
| Iteration and numerical methods | 322,323 |  |  |  |
| Proof and counter-examples | 324 |  |  |  |
| Direct algebraic proof | $325,326,327$ |  |  |  |

Ratio, proportion and rates of change

| Topics | Clip Number |  |  |
| :--- | :---: | :---: | :---: |
| Algebraic direct proportion | 344,345 |  |  |
| Algebraic inverse proportion | 347 |  |  |
| Exponential equations: Iterative processes | Coming soon |  |  |

Geometry and measures

| Topics | Clip Number |  |  |  |
| :--- | :---: | :--- | :--- | :--- |
| Congruence proofs | 684, $685,686,687,688$, <br> 689,690 |  |  |  |
| Enlargements | 646,647 |  |  |  |
| Invariance | 655 |  |  |  |
| Describe combined transformations | 656,657 |  |  |  |
| Circle theorems: Angles inside a circle | $593,594,595,596,597$ |  |  |  |
| Circle theorems: Tangents and chords | $598,599,600,601,602$ |  |  |  |
| Circle theorems multi-step | $603,604,605,606$ |  |  |  |
| Prove circle theorems | Coming soon |  |  |  |
| Compound units: Density problem solving | $730,732,733$ |  |  |  |
| Volume of frustrums | 578 |  |  |  |
| Volume: Problem solving | 583 |  |  |  |
| Similar Shapes: Area | $615,616,617$ |  |  |  |
| Similar Shapes: Volume | $618,619,620,621$ |  |  |  |
| Pythagoras' Theorem: Problem solving | 503,504 |  |  |  |
| Right-Angled trigonometry: Problem solving | 513,514 |  |  |  |
| 3D Pythagoras and trigonometry | $505,506,507$ |  |  |  |
| Sine rule for area | $517,518,519$ |  |  |  |
| Sine rule | $521,522,523,524,525$ |  |  |  |
| Cosine rule | $527,528,529,530$ |  |  |  |
| Non-right-angled trigonometry: | 532,533 |  |  |  |
| Problem solving | 531 |  |  |  |
| Bearings: Sine and cosine rule | $628,629,630,631,632$, |  |  |  |
| Vectors: Magnitude | $633,634,635,636$ |  |  |  |
| Vectors: Geometry problems |  |  |  |  |

## Probability

| Topics | Clip Number |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Product rule for counting | $671,672,673$ |  |  |  |
| Conditional probability | $364,365,366,367,389,390$ |  |  |  |
| Probability from Venn diagrams | $385,386,387,388,391$ |  |  |  |

Probability from Venn diagrams
385, 386, 387, 388, 391

## Statistics

| Topics | Clip Number |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Quartiles and interquartile range | 411,412 |  |  |  |
| Mean from grouped frequency tables | 418 |  |  |  |
| Averages problems | 421 |  |  |  |
| Cumulative frequency diagrams | $437,438,439$ |  |  |  |
| Box plots | $434,435,436,440$ |  |  |  |
| Frequency polygons | 441 |  |  |  |
| Histograms | $442,443,444,445,446$, <br> $447,448,449$ |  |  |  |

