

## GCSE Mathematics - Higher Tier - Revision Checklist

## The most important topics to revise are:

| SKILL  | Corbett Maths<br>Video Number | Watched?   | MyMaths Homework Task |                  |              |  |
|--|-------------------------------|------------|-----------------------|------------------|--------------|--|
|  |                               | <b>√ x</b> | Not sure?!            | Getting<br>there | Feeling Good |  |
|  |                               |            |                       | :                |              |  |
| <ul> <li>Number properties (square, cube, reciprocal)</li> </ul>   | 227, 228, 145                 |            |                       |                  |              |  |
| • Standard form calculations<br>(+, -, x, ÷)   | 301, 302, 303                 |            |                       |                  |              |  |
| <ul> <li>Zero, positive, negative and<br/>fractional indices</li> </ul>                                  | 1772, 173,<br>174, 175        |            |                       |                  |              |  |
| <ul> <li>Converting recurring decimals to<br/>fractions</li> </ul>                                       | 96                            |            |                       |                  |              |  |
| • Surds (simplifying, +, -, x, ÷)  | 305, 306, 307,<br>308         |            |                       |                  |              |  |
| <ul> <li>Bounds ((+, -, x, ÷) (Note:<br/>sometimes referred to as "limits of<br/>accuracy")</li> </ul>   | 183, 184                      |            |                       |                  |              |  |
| <ul> <li>Drawing and interpreting<br/>quadratic, cubic, reciprocal and<br/>exponential graphs</li> </ul> | 264, 265, 344,<br>345, 346    |            |                       |                  |              |  |
| • Graph transformations  | 323                           |            |                       |                  |              |  |
| $\cdot$ Changing the subject of a formula  | 7,8                           |            |                       |                  |              |  |
| <ul> <li>Forming, factorising and solving<br/>quadratic equations</li> </ul>                             | 118, 119, 266                 |            |                       |                  |              |  |
| • Algebraic fractions<br>(simplifying, +, -, ×, ÷))  | 21, 22, 23, 24                |            |                       |                  |              |  |
| • Using the quadratic formula  | 267                           |            |                       |                  |              |  |
| <ul> <li>Simultaneous equations</li> </ul>   | 295, 206                      |            |                       |                  |              |  |
| <ul> <li>Trial and improvement</li> </ul>  | 116                           |            |                       |                  |              |  |
| • Constructing 30, 60, 90 and 45<br>degree angles  | 68, 69, 70, 71                |            |                       |                  |              |  |
| <ul> <li>Proof of congruence in triangles</li> </ul>   | 67                            |            |                       |                  |              |  |
| • Pythagoras' Theorem in 3D  | 259                           |            |                       |                  |              |  |
| • Trigonometry (SOHCAHTOA)   | 330, 331, 332                 |            |                       |                  |              |  |
| • Sine and cosine rule   | 333, 334, 335,<br>336         |            |                       |                  |              |  |
| <ul> <li>Sketching and using trigonometric<br/>graphs</li> </ul>   | 338, 339, 340,<br>341         |            |                       |                  |              |  |
| • Circle theorems  | 64, 65                        |            |                       |                  |              |  |

| • Enlargement (positive, negative and fractional scale factors)     | 104, 104a, 105,<br>106, 107, 108 |  |  |
|---|----------------------------------|--|--|
| <ul> <li>Cubes and cuboids (surface area<br/>and volume)</li> </ul> | 310, 355                         |  |  |
| • Prisms (surface area and volume)                                  | 312, 356                         |  |  |
| • Cylinder (surface area and volume)                                | 315, 357                         |  |  |
| • Pyramid (volume)  | 360                              |  |  |
| <ul> <li>Cones (surface are and volume)</li> </ul>                  | 314, 359                         |  |  |
| • Sphere (surface area and volume)                                  | 313, 361                         |  |  |
| • Venn diagrams   | 380                              |  |  |
| <ul> <li>Probability tree diagrams</li> </ul>                       | 252                              |  |  |
| • Addition and multiplication laws of probability                   | 244, 249                         |  |  |

## Additional topics to revise which have appeared in past papers relatively frequently:

| SKILL  | Corbett Maths<br>Video Number | Watched?   | MyMaths Homework Task                   |                  |              |  |
|--|-------------------------------|------------|---|------------------|--------------|--|
|  |                               | <b>√ x</b> | Not sure?!                              | Getting<br>there | Feeling Good |  |
|  |                               |            | (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) | •••              |              |  |
| <ul> <li>Highest common factor and lowest<br/>common multiple</li> </ul> | 218, 219                      |            |   |                  |              |  |
| <ul> <li>Direct and inverse proportion</li> </ul>                        | 254, 255                      |            |   |                  |              |  |
| <ul> <li>Straight line graphs</li> <li>(y = mx + c)</li> </ul>           | 191, 194                      |            |   |                  |              |  |
| • Factorising  | 117                           |            |   |                  |              |  |
| <ul> <li>Forming and solving inequalities</li> </ul>                     | 178, 179                      |            |   |                  |              |  |
| • Expanding double brackets  | 14                            |            |   |                  |              |  |
| <ul> <li>Forming and solving linear<br/>equations</li> </ul>             | 115                           |            |   |                  |              |  |
| • Difference of two squares  | 120                           |            |   |                  |              |  |
| • Regions  | 182                           |            |   |                  |              |  |
| <ul> <li>Similar shapes</li> <li>(length, area and volume)</li> </ul>    | 292, 293a,<br>293b            |            |   |                  |              |  |
| • Area of sector   | 46                            |            |   |                  |              |  |
| <ul> <li>Conditional probabilities</li> </ul>                            | 247                           |            |   |                  |              |  |

<u>Please note</u>: These are not the only topics which could appear in the GCSE Mathematics exams, however they are the key topics which have appeared in past papers in recent years.

These lists have been created to help pupils focus their revision: they should still however also be revising the other topics we have covered in class.