



## Revision List

### Year 9 Mathematics Examination

**Paper 1:** 45 minutes (*without* a calculator)

**Paper 2:** 45 minutes (*with* a calculator).

**Equipment:** You will need a *biro, pencil, calculator, protractor, compass and ruler.*



#### 1. Parts of a Number

Part-whole and comparison bar models  
 Sharing a number in a given ratio  
 Bar model worded problems  
 Equivalent ratios  
 Simplifying ratios  
 Comparing ratios  
 The unitary method  
 Map work

Calculating a fraction of a number  
 Comparing the size of fractions  
 Improper fractions and mixed numbers  
 Calculating with fractions  
 Equivalent fractions  
 Simplifying fractions  
 Fractions on a calculator  
 Calculating the reciprocal

#### 2. Measuring Shapes 2

Circle terminology  
 Calculating the circumference of a circle  
 Calculating the area of a circle  
 Finding the radius from the area  
 Drawing solids on isometric paper  
 Drawing elevations of solids

Drawing a solid given a set of elevations  
 Pythagoras' theorem (2-D)  
 Proving whether a triangle is right-angled  
 Creating a scale drawing  
 Interpreting a scale drawing

#### 3. Developing Algebra

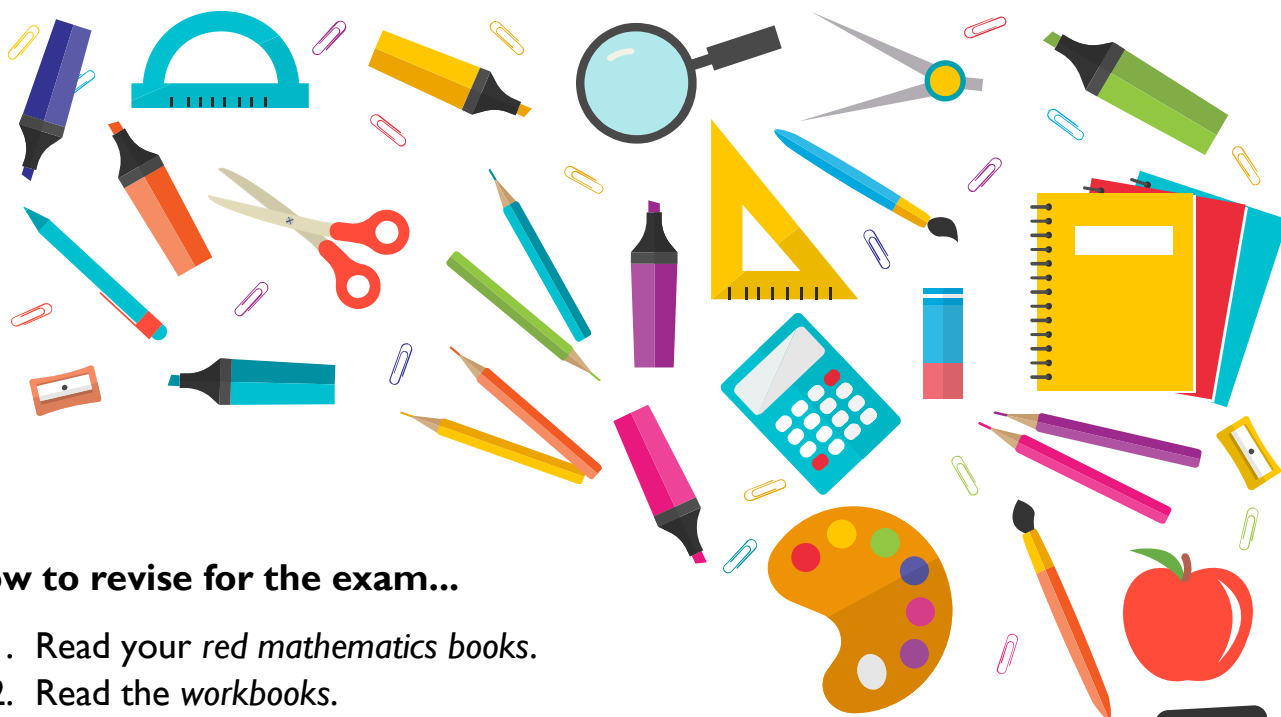
The  $n$ th term of a linear sequence  
 Finding the position of a term  
 Expanding algebraic expressions  
 Expanding and simplifying two linear expressions  
 Expanding and simplifying using FOIL  
 Brackets containing more than two terms

Equations of the form  $a(bx + c) = d$   
 Equations of the form  $a(bx + c) = d(ex + f)$   
 Equations of the form  $(ax + b)(cx + d) = 0$   
 Solving equations containing fractions  
 Trial and improvement

#### 4. Data Handling and Statistics 3

Calculating the median of a data set  
 Calculating the median from a frequency table  
 Comparing two distributions using the median  
 The median class / estimate of the median  
 Calculating the interquartile range of a data set  
 Completing a cumulative frequency table  
 Drawing a cumulative frequency diagram  
 Estimating the median and interquartile range from a cumulative frequency diagram

Drawing a scatter diagram  
 Types of correlation  
 Drawing the line of best fit (2 methods)  
 Probability of an event as a fraction  
 Probability that an event will not happen  
 Sample space diagrams  
 Expected frequency



### How to revise for the exam...

1. Read your *red mathematics books*.
2. Read the *workbooks*.



3. Read the *end of unit tests*, and the *reflection sheets*.
4. Watch the (Welsh) *revision videos* on YouTube.

Parts of a Number



Measuring Shapes 2



Developing Algebra



Data Handling and Statistics 3

