

KS4 Learning Journey
GCSE Foundation Tier – Year 10 Learning Cycle 3

Please watch the video on www.corbettmaths.com for each topic.

Percentages	Video number
Interpret percentages as an operation, solve percentage problems using multipliers	239
Define percentages as parts of one hundred	
Apply percentages as a fraction or a decimal using as a multiplier	239
Express one quantity as a percentage of another	237
Compare two quantities using percentages	234
Work with percentages greater than 100	
Solve problems including percentage increase/decrease and simple interest	238

Ratio and Proportion	Video number
Understand how fractions relate to ratio	269a
Express one quantity as a fraction of another	136
Write and simplify given ratios	269
Work out a missing amount given one quantity and a ratio	271
Split an amount by a given ratio	270
Apply ratios to real contexts and problems	270
Work out best buy problems	210

Straight Line Graphs	Video number
Work with coordinates in all four quadrants	84
Plot graphs of equations that correspond to straight lines	186,187
Solve geometrical problems on coordinate axes	
Find the equation of a line through two given points	195
Find the equation of a line through one point given the gradient	194
Use the form $y=mx + c$ to identify perpendicular lines	197
Identify and interpret gradients and intercepts of straight lines, both graphically and algebraically	189,191

Sequences	Video number
Continue a sequence	286
Generate terms of a sequence using the nth term	288
Continue a picture pattern	290
Recognise and use sequences of triangular, square and cube numbers and arithmetic progressions	287a
Recognise and use Fibonacci-type sequences, quadratic sequences and geometric progressions	
Find the nth term of linear sequences	288

Transformations	Video number
Be able to reflect shapes	272
Be able to describe a reflection	273
Be able to rotate shapes	275
Be able to describe a rotation	275
Be able to translate shapes and describe a given translation using a vector	325,326
Be able to enlarge a shape using integer scale factors	104
Be able to enlarge a shape using a fractional scale factor	107
Identify and construct congruent and similar shapes	66,291

KS4 Glossary
GCSE Foundation Tier – Year 10 Learning Cycle 3

Percentages		
Multiplier	A quantity by which a given number is to be multiplied.	

Ratio and Proportion		
Ratio	A ratio expresses the relationship in quantity or size of two or more things.	

Straight Line Graphs		
Gradient	The gradient is the change in y over the change in x , or how steep a line is.	
Perpendicular	Lines at right angles to each other are perpendicular.	

Sequences		
Triangular Numbers	A triangular number is the result of adding consecutive natural numbers together, starting at 1.	

Transformations		
Scale Factor	The scale factor of an enlargement is the ratio of the lengths in the image to the in the original object.	
Symmetry	Symmetry is when two or more parts of a shape are identical after a flip, slide or turn.	
Translate	If we translate a shape, we move it a set distance and direction, without making any other changes to the shape itself.	
Vector	A vector is a quantity that has magnitude and direction.	