Year 10 further maths mock assessment revision list

Paper 1 – non calculator

All topics highlighted in yellow are topics that you have not yet learned in further maths or your normal maths lessons**. Please focus on the topics you have learned as a priority.**

Topic	Sparx link
Simplifying surds	P733
Rationalising denominators containing two terms	P290
Expanding double brackets	P424
Factorising into one bracket	P107
Factorising quadratic expressions of the form ax^2+bx+c	P896
Adding and subtracting algebraic fractions	P496
Constructing and solving inequalities	P475
Solving equations involving fractional and negative indices	P228
Position-to-term rules for quadratic sequences	P447
Substituting into functions	P116
Domain and range of functions	P934
Plotting graphs of quadratic functions	P241
Plotting straight line graphs	P120
Finding the equation of a straight line from two points on the line	P128
Equations of circles with centre (a,b)	P998
Using differentiation to find gradients	P750
Mixed problems: Circle theorems	P887
Finding unknown sides in right-angled triangles	P331
The sine rule	P786
The cosine rule	P832
Solving trigonometric equations using trigonometric identities	P590

Paper 2 – Calculator

Topic	Sparx link
Index rules with positive indices	P714
Index rules with negative indices	P884
Simplifying expressions by collecting like terms	P234
Simplifying expressions involving fractional and negative indices	P746
Factorising the difference of two squares	P556
Completing the square	P853
Using the factor theorem	P694
Multiplying algebraic fractions	P252
Dividing algebraic fractions	P760
Changing the subjects of formulae	P791

Solving equations with the unknown in the denominator	P549
Solving double inequalities	P567
Solving quadratic equations using the quadratic formula	P206
Solving simultaneous equations involving quadratics	P143
Substituting into position-to-term rules	P982
Limits of sequences	P369
Domain and range of functions	P934
Interpreting graphs of quadratic functions	P557
Calculating midpoints	P491
Interpreting equations of straight line graphs	P939
Equations of parallel and perpendicular lines	P868
Using differentiation to find gradients	P750
Finding and classifying stationary points	P511
Multiplying matrices	P349
Mixed problems: Circle theorems	P887
Using Pythagoras' theorem in 3D	P405
The cosine rule	P832
The area rule	P923
Graphs of trigonometric functions	P603
Using trigonometric identities to simplify expressions	P977