Pearson

Activity 1 answers

Topic in Pure 1	**Present in Edexcel Int GCSE**	**Comment**
Laws of indices for all rational exponents.	Yes	
Use and manipulation of surds.	Yes	
Quadratic functions and their graphs	Yes	
The discriminant of a quadratic function.	No	
Completing the square. Solution of quadratic equations.	Yes	
Solve simultaneous equations; analytical solution by substitution	Yes	
Interpret linear and quadratic inequalities graphically	No	
Represent linear and quadratic inequalities graphically	No	
Solutions of linear and quadratic inequalities	Yes/No	Linear yes, some easy quadratic on Edexcel Int GCSE
Algebraic manipulation of polynomials, including expanding brackets and collecting like terms, factorisation	Yes	
Graphs of functions; sketching curves defined by simple equations. Geometrical interpretation of algebraic solution of equations. Use of points of intersection of graphs to solve equations.	Yes partly	Sketching is not part of Edexcel Int GCSE
Knowledge of the effect of simple transformations on the graph of $y = f(x)$ as represented by $y = af(x)$, $y = f(x) + a$, $y = f(x + a)$, $y = f(ax)$.	Yes	
Equation of a straight line, including the forms $y - y1 = m(x - x1)$ and $ax + by + c = 0$.	Partly	Edexcel Int GCSE requires $y = mx + c$ only
Conditions for two straight lines to be parallel or perpendicular to each other	Yes	
The sine and cosine rules, Including the ambiguous case of the sine rule and the area of a triangle in the form $\frac{1}{2}ab \sin C$.	Partly	Not the ambiguous case
Radian measure, including use for arc length and area of sector	No	
Sine, cosine and tangent functions. Their graphs, symmetries and periodicity.	Yes	
The derivative of $f(x)$ as the gradient of the tangent to the graph of $y = f(x)$ at a point; the gradient of the tangent as a limit; interpretation as a rate of change; second order derivatives.	Yes	More sophisticated treatment at Int AL
Differentiation of x^n and related sums, differences and constant multiples	Partly	Now fractional and negative indices
Applications of differentiation to gradients, tangents and normals.		
Integration	No	Completely new