Standard Grade **CREDIT** **Banker questions highlighted in yellow**

Question Analysis

	PPQ	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010		2011		CHK
	Rev. Code	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	✓
Calculations, fractions, percentages																								
BODMAS and Numerical Calculations; including working with positive and negative numbers	**1**	1	1	1	1	1		1		1		1		1		1		1	1	1		1		
Fractions - Add, subtract, multiply, divide work with Improper Fractions (may be in context)	**2**	2		2		2		2		2		2		2				2		2		5		
Find fraction of a quantity																								
Find percentage of a quantity										3														
Growth & Decay calculations including: appreciation/depreciation/savings interest e.g. increase 4% per year for 3 years, e.g. decrease by 15% per year for 3 years. Using multiplier: e.g. 1.04 or 0.85 (for above)	**3**		3				1		4						1		1		8		1 9		1	
Reversing the Change - working back to 100% or calculate price before VAT	**4**				2			6					3		5		3	7		6			4	
Percentage Profit/increase/decrease , etc.																								
Standard Form (Scientific Notation) including use in calculations	**5**		1		1				1		1		1						1					
Rounding - decimal places / Significant Figures			5,11		3, 5		1		7		4,10		6		2		1		1,3		4		3	
Proportion and Variation																								
Simple Ratio and Proportion e.g. 4 : 3 : 2	**6**				7	10									9						9			
Direct Proportion/Inverse Proportion	**7**		9														6		7		11			
Joint Variation - halving, doubling	**7**		9		10									10								11		
Distance, Speed, Time																								
DST Calculations							11a,b		1							6								
Interpreting Graphs																								

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Statistics & Data Handling																								
Mean, Median, Mode, Range (simple)																7								
Work back from mean to individual values																7								
Combining means																								
Median from a frequency table																						6		
Mean from Frequency Table																								
Quartiles from a list																								
Make a cumulative frequency table from data										7														
Quartiles and median from Cum. Freq. Table										7														
Pie Charts - Read/Construct - Angles																								
5 Figure Summary, Dot & Box Plots	**8**	5a		8		9		5																
Stem & Leaf Diagram including finding median and mode																2a								
Standard Deviation and mean	**9**		2a				2a,b		3		2		2a		3a						3a			
Interpretation of Spread/comparison	**9**	5b	2b				2c						2b		3b				5		3b			
Scattergraph, Line of Best Fit																			6b					
Probability																								
Simple Probability, icluding how many outcomes	**10**					8		7		4				3				6		5				
Probability and Relative Frequency from a table	**10**	7a														2b						6		
Probability & Expected value from a table		7b																						
Conditional Probability																								
Areas and volumes																								
Areas of Triangle and Quadrilaterals: (Square, rectangle, kite, rhombus, parallelogram, trapezium) and use for problem solving												10a 10b								11			9a	
Volume of Prism and/or working backwards to a length	**11**		8		5				9				7a 7b								5		9b	
Surface area of a prism																								
Cylinders, Volume, Curved Surface Area and working back from volume to a length including problems in context	**12**		5				4								12a 12b				2				11	
Angles																								
Angles & Parallel Lines, e.g. vert. opp., alternate, corresponding also basic angle properties of shapes and regular polygons.													6a						9a,c				7a	
Angle properties of triangle, quadrilaterals																								

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Circles																								
Circumference, Area, working backwards to solve problems								12					1											
Circle Properties: Tangents (90° to radius), Chord, Isosceles Triangles, angle in semi circle.																	5b							
Area of Sector, Length of arc, also working backwards to find angle or radius	**13**										10		8		7		9		11		6		5	
Similarity																								
Similar Triangles - calculating lengths	**14**				12						6		11	8										
Similar Shapes - area, volume calculations	**15**						9					7							4		7		6	
Pythagoras																								
Pythagoras - may need to be used twice in same question.	**16**									10		5		9		10	5a 5b	5			5 12			
Pythagoras in the circle: Oil/milk tanker or sheep shelter problems	**17**				6		10		8					12									8	
Converse of Pythagoras											5													
Trigonometry																								
Trigonometry - SOH-CAH-TOA - may be applied more than once in the question	**18**		10b		4		6		6		10	5												
Bearings & Trigonometry			6				3				7		6		6				9					
Exact Values - sin, cos, tan																								
Sine Rule - including use of bearings	**19**		6		4				5		7				6			11			8	10		
Cosine Rule - including use of bearings	**19**		10a	7			3		7				6b				7		9				7b	
Area of Triangle = $^1/_2$ ab sin C use it: to find the angle or the value of sin C or to find one of the sides (given area/angle)	**20**						7		9		3				8		8				10			
Identify Trig Function: y = a sin bx + c								8						13										
Solve Trig Equation: eg 3 sin x - 2 = 0	**21**		7		8				10		11		10		10		12						12b	
Max and min values of Trig functions	**22**												10								13		12a	
Applications in context - using as a model													10								13			
Algebra																								
Breaking Brackets, simplify or solve equation						3						6		5										
Evaluate an expression								3																
Using FOIL to break brackets													4a					4b			2			
Using Multiplication Table to break brackets																							2	
Factorising - common factor																								
Factorising - difference of 2 squares	**23**			5a								5a				2		4a				2		
Factorising - quadratic function ( )( )						5																		
Simplify algebraic fraction	**23**			5b				4				5b				5								
Add, subtract, multiply, divide algebraic fractions including in context.																5								

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Algebra - solving equations																								
Solve simple linear equations												6												
Solve Equations with fractions	**24**	4					11c			6			11			6, 13				11		4	10	
Functions - evaluating: e.g. f(-2)	**25**	3		4		4a				11a		3						3a				3		
Functions - use in reverse e.g. Given f(a) = -2	**25**					4b				11b								3b						
Solve Inequalities				3											4									
Using a formula or using it backwards	**26**						5				1		9a	14a 14b			11a		10					
Change subject of formula	**27**			6										4		3		9		3				
The Straight line equation																								
Straight Line - Gradient or Equation from a graph, table or coordinates of points.	**28**	6	4a	12		6a,b			2a	5	9	4		6		4			6a			8		
Straight Line - Using an equation, find coordinates of a point on the line Interpretation of the straight line in context	**28**		4b			6c		10	2b		9								6b	7 9		8		
Simultaneous Equations																								
Simultaneous Equations - form and solve	**29**		4b	13		7		8				9		11			4	8		7		7		
Quadratic Equations																								
Quadratic Equation - solve using factors	**30**			9					11	12			9c		11b 13	8	11c	10		4b	12		12	
Quadratic Equation - solve using formula	**30**		11c		3						4				2				3		4		3	
Quadratic Functions - symmetry, roots, max/min Using the graph and properties of Quadratic	**30**	8a, b, c					8a, b,c					8			13	8		10					12	
Forming a quadratic equation; Quadratic equation as a model for problem. solving and interpret solution in context	**30**		11a,b						11	12			9b		11a 11b 13	8 12	11b	10		4a	12		12	
Indices & Surds																								
Indices	**31**			11		12a		11b					4b	7		9		4c				9a		
Surds - simplify, evaluate	**32**	10		10		12b		11a		11a			4c	9		9, 10		5		8		9b		
Surds - rationalise denominator		10																						
Growth and decay - using the exponential function e.g. 2^x and solving equations involving 2^x, 3^x etc.		11a, b, c			11											10								
Problem solving																								
Making and using formula to solve problems	**33**				9	13	5			9	8	11				12	10						10	
Number Sequences and patterns	**34**	9			11	11				8									12	10		12		