



National 4 Expressions & Formulae

Past paper questions-National Level 4/General level unless otherwise stated

<u>Topic & number</u>	<u>Past Paper</u>	<u>Question</u>
Outcome 1 – Applying algebraic skills to manipulating expressions and working with formulae		
1.1 Using the distributive law in an expression with a numerical common factor to produce a sum of terms	2010 P2	6(a)
	2009 P2	5(b)
1.2 Factorising a sum of terms with a numerical common factor	2012 P2	9(b)
	2011 P1	6(a)
	2009 P2	5(a)
	2008 P2	8(b)
	2007 P2	5(a)
	2006 P1	6(a)
1.3 Simplifying an expression which has more than one variable		
1.4 Evaluating an expression or a formulae which has more than one variable		
1.5 Extending a straightforward number or diagrammatic pattern and determining its formula	2012 P1	3
	2011 P1	3
	2010 P1	6
	2009 P1	3
	2008 P2	4
	2007 P1	6
	2006 P1	4
1.6 Calculating the gradient of a straight line from horizontal and vertical distances	2011 P2	11
	2006 P1	5
Outcome 2 - Applying geometric skills to circumference, area and volume		
2.1 Calculating the circumference and area of a circle	2012 P2	12 & 14
	2011 P2	14
	2009 P2	3
	2008 P2	9 & 11
	2007 P2	7
	2006 P2	9
2.2 Calculating the area of a parallelogram, kite, trapezium	2011 P1	5
	2007 P2	10(a)

2.3 Investigating the surface of a prism	2009 P2	14
2.4 Calculating the volume of a prism	2010 P2	13
	2009 P2	12
	2008 P2	13
	2007 P2	10(b)
2.5 Using rotational symmetry	2011 P1	8
	2010 P1	4
	2009 P1	4(tiling) & 5
	2008 P1	3
	2007 P1	4
<u>Outcome 3</u> - Applying statistical skills to representing and analysing data and to probability		
3.1 Constructing a frequency table with class intervals from raw data		
3.2 Determining statistics of a data set	2012 P2	10
	2011 P1	4
	2010 P2	1
	2009 P1	8(b)
	2009 P2	7
	2008 P2	10
	2006 P1	7 & 8(b)
3.3 Interpreting calculated statistics		
3.4 Representing raw data in a pie chart	2010 P2	8
3.5 Using probability	2011 P2	2
	2008 P1	8
	2007 P1	9
	2006 P1	6
<u>Outcome 4</u> – Mathematical reasoning skills		
4.1 Interpreting a situation where mathematics can be used & indentifying a valid strategy	2010 P1	9
	2010 P2	9
4.2 Explaining a solution and/or relating it to context		