

B1	Non-Calculator Paper	
1	Evaluate $1\frac{4}{5} \div \frac{3}{10}$ Give your answer in the simplest form.	2
2	Factorise (i) $x^2 - y^2$ (ii) $x^2 - 2x - 48$	1 2
3	Expand and simplify $(2x + 1)(x - 5) + 2(x^2 + 1)$	3
4	Find the equation of the line passing through the points $(-3,1)$ and $(-5,9)$. Give your equation in its simplest form.	3
5	A crisp manufacturer makes packets of crisps which should weigh 30 grams. A daily sample of 12 crisp packets was weighed with the results shown below. 29 31 30 28 32 32 33 28 27 28 29 30 Calculate the median and the interquartile range for these weights.	3
6	Express $\frac{6}{\sqrt{3}}$ with a rational denominator. Give your answer in the simplest form.	2
7	Jan buys a school backpack from a sport website. He has a loyalty card that gives him a 20% discount. He pays £22.80 for the backpack. Calculate the cost of the backpack without the discount.	3
8	Remove the brackets and simplify $(3p^4)^2$	2
9	Change the subject of the formula $F = \frac{D-1}{x^2}$ to D	2
10	(a) Express $y = x^2 - 4x + 3$ in the form $y = (x + a)^2 + b$	2
	(b) Hence or otherwise state the coordinates of the turning point of the graph $y = x^2 - 4x + 3$.	2
	(c) State the coordinates of the point where the graph $y = x^2 - 4x + 3$ crosses the y -axis.	1
	28 marks	