

B1	Answers to the Non-Calculator Paper	
1	Mark 1 change the mixed fraction and change the divide to multiply $\frac{9}{5} \times \frac{10}{3} = \frac{90}{15}$ Mark 2 consistent answer in the simplest form	6
2	Mark 1 factorise the difference of two squares $(x + y)(x - y)$ Mark 2&3 factorise the trinomial $(x - 8)(x + 6)$	
3	Mark 1 start to expand (evidence of any 3 correct terms) Mark 2 all terms correct $2x^2 - 10x + x - 5 + 2x^2 + 2$ Mark 2 collect like terms $4x^2 - 9x - 3$	
4	Mark 1 find the gradient between two points $m = \frac{8}{-2} \text{ or } -4$ Mark 2 substitute gradient and one point into the equation of the straight line. $9 = -4 \times -5 + c \text{ or } y - 9 = -4(x + 5) \text{ etc}$ Mark 3 find c and state the equation in the simplest form	$c = -11, y = -4x - 11$
5	Mark 1 order the list and identify the median $27 \ 28 \ 28 \ \ 28 \ 29 \ 29 \ \ 30 \ 30 \ 31 \ \ 32 \ 32 \ 33$ Mark 2 identify the quartiles $Q_1 = 28, Q_2 = 31.5$ Mark 3 state interquartile range $IQR = 31.5 - 28 = 3.5$	median is 29.5
6	Mark 1 know how to rationalise the denominator $\frac{6}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{6\sqrt{3}}{3}$ Mark 2 state answer in simplest form $\frac{6\sqrt{3}}{3} = 2\sqrt{3}$	
7	Mark 1 know that the new price is $80\% = 22.80$ Mark 2 use a valid strategy to find 10% or 20% etc $20\% = 22.80 \div 4 \quad 20\% = 5.70 \text{ or } 10\% = 22.80 \div 8, 10\% = 2.85$ Mark 3 calculate answer correctly	£28.50
8	Mark 1 one term correct $3^2 = 9 \text{ or } (p^4)^2 = p^8$ Mark 2 both terms present and correct $9p^8$	
9	Mark 1 multiply through by x^2 $Fx^2 = D - 1$ Mark 2 add 1 $Fx^2 + 1 = D, \quad D = Fx^2 + 1$	
10	Mark 1 correct bracket with square $(x - 2)^2$ Mark 2 completed square $(x - 2)^2 - 1$ Mark 3&4 coordinates of the turning point are $(2, -1)$ Mark 5 coordinates of the y -intercept. $(0, 3)$ <p>If you wish you can factorise $y = x^2 - 4x + 3$ to give $y = (x - 3)(x - 1)$. When this is set equal to zero it gives the roots $x = 3$ and $x = 1$. Thus the x-coordinate of the turning point is $x = 2$ which can be substituted into the equation to give $(2, -1)$</p>	