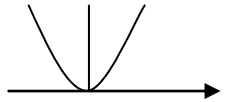
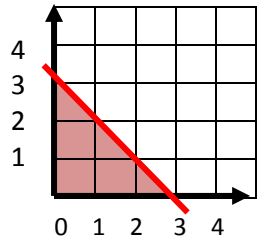
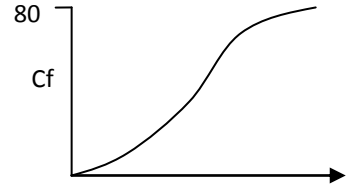
Caldew School **Maths Basic Skills** Level 8 Test 2

Name _____ **Date**_____ **Class**_____

Section A:Numbers & calculating		Section B: Algebra & Shape, space & measures		Section C: Using and applying	
8.1 1. Write $\frac{5}{11}$ as a recurring decimal		*8.4* 11. Factorise: $x^2 + 7x + 6$		21. **Linear-Quadratic-Cubic-Reciprocal** Which function is represented by this graph? 	
8.1 2. Write $0.\dot{2}\dot{7}$ as a fraction		*8.4* 12. Factorise: $x^2 - 36$			
8.2 3. Work out the balance for £3000 invested for 3 years at 5% per annum		*8.5* 14. Multiply & simplify: $(3x + 4)(x + 1)$		22. What inequality is represented here?  	
8.2 4. The value of a car depreciates by 24% per year. Work out the current value of a car bought 3 years ago for £20000.		*8.5* 14. Multiply & simplify: $(2x + 5)^2$			
8.2 5. In a '20% off' sale, a coat was £68. Work out the original price.		*8.6* 15. Make r the subject of the formula: $V = \pi r^2 h$		23. On a spinner: P(3) = ⅓ and the p(4) = ⅔ What is the probability of getting 3 or 4	
8.2 6. The cost of a scooter has increased by 20% to £144. Work out the original price.		*8.6* 16. Make b the subject of the formula: $S = ab - bc$			
8.3 7. Write 63000 in standard form:		*8.7* 17. $S = \frac{u^2 + v^2}{2a}$ Find S when, u = -4, v = -2, a = 5		24. A courgette seed and a pumpkin seed is planted. P(courgette seed germinates) = ⅚ P(pumpkin seed germinates) = ⅛ What is the probability that BOTH seeds germinate?	
8.3 8. Write 1.6×10^{-2} as an ordinary number		*8.7* 18. $D = ut + kt^2$ Find D when u = 10, t = 1.4, k = -3			
8.3 9. Work out $(3 \times 10^5) \times (2 \times 10^4)$ Give your answer in standard form		*8.12* 19. If $\tan x = \frac{7}{12}$, find x (3sf)		25. Show on the cumulative frequency graph how to take the median reading  	
8.3 10. Work out $(6.67 \times 10^8) \div (4.6 \times 10^{-3})$ Give your answer in standard form		*8.13* LENGTH or AREA or VOLUME 20. Which measure does this expression represent: **4abc**			
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	