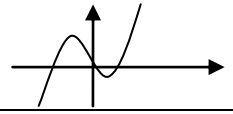
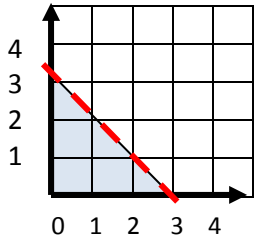
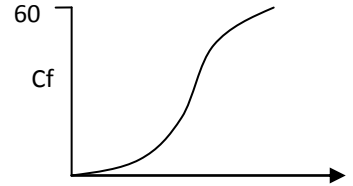
Caldew School **Maths Basic Skills** Level 8 Test 3

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

Section A:Numbers & calculating		Section B: Algebra & Shape, space & measures		Section C: Using and applying	
8.1 1. Write $\frac{5}{6}$ as a recurring decimal		*8.4* 11. Factorise: $x^2 - 6x + 8$		21. **Linear-Quadratic-Cubic-Reciprocal** Which function is represented by this graph? 	
8.1 2. Write $0.\dot{2}\dot{3}$ as a fraction		*8.4* 12. Factorise: $x^2 - 81$			
8.2 3. Work out the balance for £5000 invested for 5 years at 7% per annum		*8.5* 14. Multiply & simplify: $(x - 2)(2x + 1)$		22. What inequality is represented here?  	
8.2 4. The value of a car depreciates by 18% per year. Work out the current value of a car bought 4 years ago for £20000.		*8.5* 14. Multiply & simplify: $(2x - 7)^2$			
8.2 5. In a '20% off' sale, a coat was £120. Work out the original price.		*8.6* 15. Make u the subject of the formula: $v^2 = u^2 + 2as$		23. On a spinner: P(3) = ⅔ and the p(4) = ⅛ What is the probability of getting 3 or 4	
8.2 6. The cost of a lamp has increased by 30% to £65. Work out the original price.		*8.6* 16. Make y the subject of the formula: $A = xy + yz$			
8.3 7. Write 0.0028 in standard form:		*8.7* 17. $S = \frac{u^2 + v^2}{2a}$ Find S when, u = -3, v = -1, a = 5		24. A courgette seed and a pumpkin seed are planted. P(courgette seed germinates) = ⅕ P(pumpkin seed germinates) = ¾ What is the probability that BOTH seeds germinate?	
8.3 8. Write 4.2×10^4 as an ordinary number		*8.7* 18. $D = ut + kt^2$ Find D when u = 20, t = ⅔, k = -5			
8.3 9. Work out $(9 \times 10^7) \div (3 \times 10^4)$ Give your answer in standard form		*8.12* 19. If $\sin x = \frac{3}{4}$, find x (3sf)		25. Show on the cumulative frequency graph how to take the lower quartile reading  	
8.3 10. Work out $(6.2 \times 10^5) \times (3.8 \times 10^7)$ Give your answer in standard form		*8.13* LENGTH or AREA or VOLUME 20. Which measure does this expression represent: **5a + 6b**			
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	