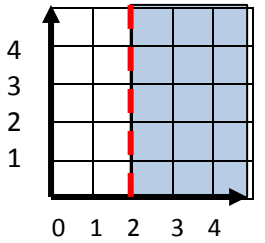
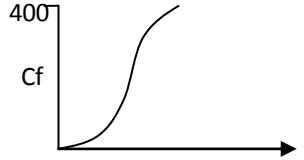
Caldew School **Maths Basic Skills** Level 8 Test 12

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

Section A:Numbers & calculating		Section B: Algebra & Shape, space & measures		Section C: Using and applying	
8.1 1. Write $\frac{11}{15}$ as a recurring decimal		*8.4* 11. Factorise: $x^2 + 2x + 1$		**21. Linear-Quadratic-Cubic-Reciprocal** Which type of graph is represented by this equation? $Y = 2x^3 - 5x^2$	
8.1 2. Write $0.\dot{5}$ as a fraction		*8.4* 12. Factorise: $x^2 - 16y^2$			
8.2 3. Work out the balance for £1500 invested for 3 years at 6.5% per annum		*8.5* 14. Multiply & simplify: (x + 2)(5x - 3)		22. What inequality is represented here?  	
8.2 4. The value of a mobile depreciates by 40% per year. Work out the current value of a mobile bought 3 years ago for £225.		*8.5* 14. Multiply & simplify: $(2a - 3)^2$			
8.2 5. In a '60% off' sale, an outfit was £144. Work out the original price.		*8.6* 15. Make r the subject of the formula: $S = r^2 - t^2$		23. P(Jack is late to school any day) = 0.6 What is the probability that Jack will be late 2 days running?	
8.2 6. A fuel bill has increased by 18% to £141.60. Work out the original cost.		*8.6* 16. Make c the subject of the formula: $a^2 = b^2 - c^2$			
8.3 7. Write 0.056 in standard form:		*8.7* 17. $v=\sqrt{u^2 + 2as}$ Find v when u = 16 a=8 & s=33		24. Alf & Amy but tickets in a raffle P(Alf wins 1st prize) = 0.28 P(Amy wins 1st prize) = 0.02 What is the probability that Alf or Amy win 1st prize?	
8.3 8. Write 4.651×10^6 as an ordinary number		*8.7* ***Give your answer correct to 3sf*** 18. $v=\sqrt{u^2 + 2as}$ Find v when u = 9.1 a=-4.7 & s=3.04			
8.3 9. Work out $(4\times10^3) + (6 \times 10^4)$ Give your answer in standard form		*8.12* 19. If $\tan 18^0 = \frac{x}{12}$, find x (3sf)		25. Show on the cumulative frequency graph how to take the inter-quartile range reading  	
8.3 10. Work out $(4.32 \times 10^{-3}) - (4.28 \times 10^{-5})$ Give your answer in standard form		*8.13* LENGTH or AREA or VOLUME 20. Which measure does this expression represent: **$a^2b + c^3$**			
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	