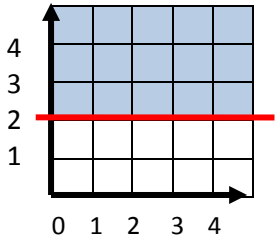
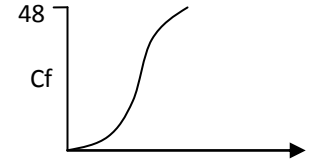
Caldew School **Maths Basic Skills** Level 8 Test 13

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

Section A:Numbers & calculating		Section B: Algebra & Shape, space & measures		Section C: Using and applying	
8.1 1. Write $\frac{13}{15}$ as a recurring decimal		*8.4* 11. Factorise: $x^2 + 14x + 24$		**21. Linear-Quadratic-Cubic-Reciprocal** Which type of graph is represented by this equation? $y = 3x - 2x^2$	
8.1 2. Write $0.\dot{1}$ as a fraction		*8.4* 12. Factorise: $25x^2 - y^2$			
8.2 3. Work out the balance for £1500 invested for 4 years at 5.4% per annum		*8.5* 14. Multiply & simplify: (2x - 2)(4x + 3)		22. What inequality is represented here?  	
8.2 4. The value of a caravan depreciates by 12% per year. Work out the current value of a caravan bought 3 years ago for £14000.		*8.5* 14. Multiply & simplify: $(2a + 1)^2$			
8.2 5. In a '80% off' sale, an iron was £13. Work out the original price.		*8.6* 15. Make t the subject of the formula: $a = \frac{t}{b} - st$		23. $P(1^{st}$ traffic lights are RED) = 0.3 $P(2^{nd}$ traffic lights are RED) = 0.4 What is the probability that both are RED?	
8.2 6. A fuel bill has increased by 18% to £147.50. Work out the original cost.		*8.6* 16. Make r the subject of the formula: $A = 4\pi r^2$			
8.3 7. Write 85700 in standard form:		*8.7* 17. $d=\sqrt{a^2 + b^2 + 2ab}$ Find d when a = 2 & b = 3		24. Max rolls 2 dice P(the total is 7) = 0.2 P(the total is 5) = 0.11 What is the probability that Max rolls 2 dice and gets totals of 5 or 7?	
8.3 8. Write 3.1×10^{-1} as an ordinary number		*8.7* ***Give your answer correct to 3sf*** 18. $d=\sqrt{a^2 + b^2 + c^2}$ Find d when a = 2 b = 3 & c = 4			
8.3 9. Work out $(7\times10^6) - (3 \times 10^3)$ Give your answer in standard form		*8.12* 19. If $\tan 18^0 = \frac{12}{x}$, find x (3sf)		25. Show on the cumulative frequency graph how to take the median reading  	
8.3 10. Work out $(7.28\times10^8)+(3.64 \times 10^6)$ Give your answer in standard form		*8.13* LENGTH or AREA or VOLUME 20. Which measure does this expression represent: $a^3 \div a^2$			
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	