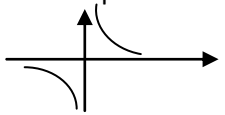
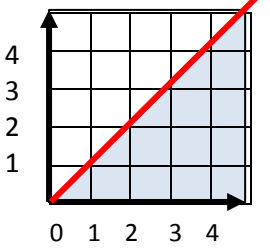
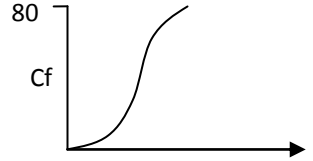
Caldew School **Maths Basic Skills** Level 8 Test 6

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

Section A:Numbers & calculating		Section B: Algebra & Shape, space & measures		Section C: Using and applying	
8.1 1. Write $\frac{1}{9}$ as a recurring decimal		*8.4* 11. Factorise: $a^2 + 8a - 20$		**21. Linear-Quadratic-Cubic-Reciprocal** Which function is represented by this graph? 	
8.1 2. Write $0.\dot{3}\dot{9}$ as a fraction		*8.4* 12. Factorise: $m^2 - 144$			
8.2 3. Work out the balance for £2400 invested for 10 years at 5% per annum		*8.5* 14. Multiply & simplify: (2a - 3)(2a - 1)		22. What inequality is represented here? 	
8.2 4. The value of a bike depreciates by 35% per year. Work out the current value of a bike bought 2 years ago for £600.		*8.5* 14. Multiply & simplify: $(x + y)^2$			
8.2 5. In a '30% off' sale, a hat was £101.50. Work out the original price.		*8.6* 15. Make w the subject of the formula: $P = \frac{3w + 20}{200}$		23. On a spinner: P(3) = ½ and the p(4) = ¼ What is the probability of getting 3 or 4	
8.2 6. The cost of a fridge has increased by 25% to £525. Work out the original price.		*8.6* 16. Make c the subject of the formula: ab – cd = ac			
8.3 7. Write 0.000034 in standard form:		*8.7* ***Give your answer correct to 3sf*** 17. $A = \pi r^2 - \pi rs$ Find A when r = 4.2 and s = 3.8		24. A courgette seed and a pumpkin seed is planted. P(courgette seed germinates) =⅜ P(pumpkin seed germinates) = ¼ What is the probability that BOTH seeds germinate?	
8.3 8. Write 8.62 x 10^2 as an ordinary number		*8.7* ***Give your answer correct to 3sf*** 18. $V = \frac{1}{3}\pi h(a^3 - b^3)$ Find V when b = -3, h = 5 and a = 4			
8.3 9. Work out $(4.8 \times 10^3) \div (1.2 \times 10^{-2})$ Give your answer in standard form		*8.12* 19. If $\tan 72^0 = \frac{12}{x}$, find x (3sf)		25. Show on the cumulative frequency graph how to take the upper quartile reading 	
8.3 10. Work out $(5.2 \times 10^6)^2$ Give your answer in standard form		*8.13* LENGTH or AREA or VOLUME 20. Which measure does this expression represent: **c(a + b)**			
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	