Class Name **Date** Section A:Numbers & calculating Section B: Algebra & Shape, space & measures Section C: Using and applying 21. Linear-Quadratic-Cubic-Reciprocal 8.1 1. Write $\frac{7}{100}$ as a recurring decimal 11. Factorise: a² - 2a - 15 Which type of graph is represented by this equation? 8.1 8.4 2. Write 0. 7 as a fraction y= <u>10</u> 12. Factorise: $4x^2 - 9y^2$ Х 8.2 8.5 22. 3. Work out the balance for £600 14. Multiply & simplify: (3x - 2)(2x - 5)What inequality is represented here? invested for 5 years at 7.5% per annum 14. Multiply & simplify: $(2a + 3)^2$ 4. The value of a mobile depreciates by 40% per year. Work out the current value of a mobile bought 3 years ago for 1 £124. 0 1 2 3 4 8.2 15. Make r the subject of the 23. 5. In a '60% off' sale, an outfit was £86. P(Jack is late to school any day) = 0.1 formula: $S = r^2 - 2t$ Work out the original price. What is the probability that Jack will be 8.2 late 2 days running? 6. A fuel bill has increased by 16% to 16. Make b the subject of the formula: $a^2 = b^2 - c^2$ £139.20. Work out the original cost. 24. Alf & Amy but tickets in a raffle 8.3 8.7 $P(Alf wins 1^{st} prize) = 0.7$ 7. Write 280 in standard form: 17. $v = \sqrt{u^2 + 2as}$ Find v when u = 20 $P(Amy wins 1^{st} prize) = 0.12$ a=6 & s=52 What is the probability that Alf or Amy Give your answer correct to 3sf 8.3 8.7 win 1st prize? 8. Write 5.6 x 10⁻⁴ as an ordinary number 18. $v = \sqrt{u^2 + 2as}$ Find v when u = 2.4a=3.2 & s=5.25 8.12 25. Show on the cumulative frequency graph 9. Work out $(5x10^{-5})$ x (2×10^{4}) 19. If $\tan x^0 = 12$, find x (3sf) how to take the upper quartile reading Give your answer in standard form 400 8.13 LENGTH or AREA or VOLUME 8.3 10. Work out $(6.72 \times 10^{-3}) + (2.84 \times 10^{-5})$ Cf 20. Which measure does this expression Give your answer in standard form represent: $a^2 + ab + 3c^2$ Total (A) Total (B) Total (C) Test Total (A+B+C) R (0-9) Y (10-19) G (20-25)