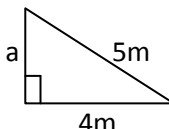


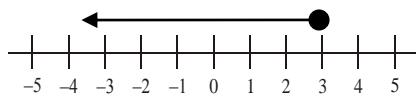

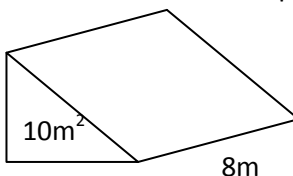



Name _____

Date _____

Class _____

| Section A: Numbers & calculating | | Section B: Algebra | | Section C: Using and applying | |
|--|--|--|-----------|---|--|
| 7.1 1. To increase an amount by 3%, what single multiplier would you use? | | 7.6 11. Expand & simplify: $(x + 1)(x + 3)$ | | 21.  To find 'a' choose one calculation: $\sqrt{5^2 + 4^2}$ OR $\sqrt{5^2 - 4^2}$ | |
| 7.1 2. To decrease an amount by 3%, what single multiplier would you use? | | 7.6 12. Expand & simplify: $(x - 5)(x + 2)$ | | | |
| 7.2 3. Increase 42kg by 3%  | | 7.8 14. Solve: $x - 1 < 3$ | | 22. 123 grams is rounded to nearest whole. Write down the minimum possible mass it could have been. | |
| 7.2 4. Decrease 42kg by 3%  | | 7.8 14. Give the inequality  | | | |
| 7.3 5. Without a calculator work out: 0.7×0.1 | | 7.9 15. Make n the subject of the formula: $M = 7n$ | | 23. A car travels at a steady speed and takes 5 hours to travel 510 miles. Work out the average speed? | |
| 7.3 6. Without a calculator work out: $9 \div 0.1$ | | 7.9 16. Work out the value of: $3x + 2y$ When $x = 4$ and $y = -5$ | | | |
| 7.4 7. Round off 4252 to one significant figure | | 7.10 17. Write down the next term in this sequence: 3 8 15 24 ... | | 24. If the relative frequency of getting a 'six' on a dice is 0.3, how many sixes would you expect to get in 400 throws of the dice? | |
| 7.4 8. Estimate the answer to: $122 \div 53$ | | 7.10 18. Write down the 1 st term in the sequence given by: $T(n) = n^2 + 4$ | | | |
| 7.5 9. Use a calculator to work out: (1dp)  $2.7^2 + 3.9^2$ | | 7.11 19. If $y = 3x^2 + 4$, find the value of y when $x = 4$ | | 25. Work out the volume of this prism?  | |
| 7.5 10. Use a calculator to work out: (1dp)  $\frac{2.3 + 6.82}{3.74 + 1.09}$ | | 7.11 20. If $y = x^3 + 3$, find the value of y when $x = -1$ | | | |
| Total (A) | | Total (B) | | Total (C) | |
| Test Total (A+B+C) | | R (0-9) | Y (10-19) | G (20-25) | |